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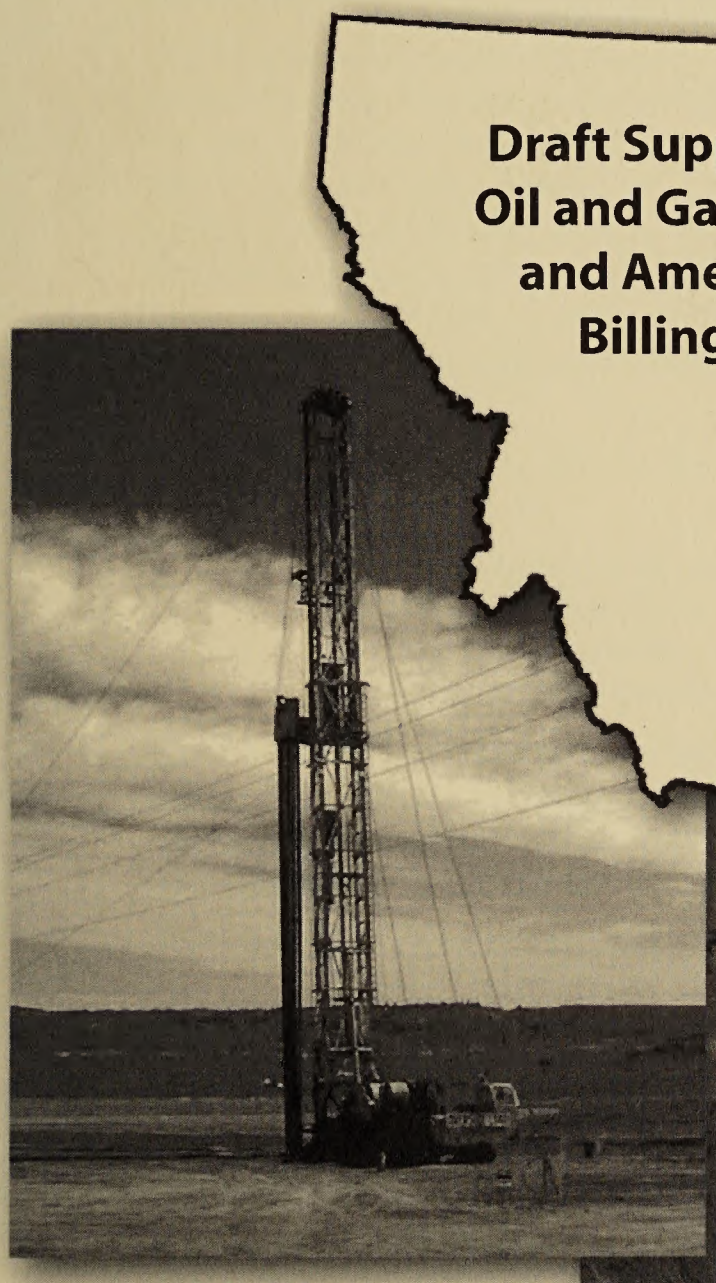
Supplemental Air Quality Analysis

Draft Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans



November 2007

Miles City Field Office

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Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301-0940
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IN REPLY TO: 1310

Dear Reader:

Enclosed for your review is *the Supplemental Air Quality Analysis to the Draft Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans* (Supplemental Air Quality Analysis). The document was prepared by the Bureau of Land Management (BLM) to assess the level of coal bed natural gas (CBNG) development that would require mitigation to reduce the potential for impacts to air quality. The comments received on the Supplemental Air Quality Analysis will be considered in the preparation of the *Final Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment to the Powder River and Billings RMPs* (Final SEIS).

The *Supplemental Air Quality Analysis* provides additional information and analyses regarding the level of CBNG development that would have the potential to impact air quality within the Powder River and Billings RMP Areas, particularly at Class I areas. It includes an analysis and comparison of the potential for CBNG development to impact air quality under different air quality emission rates under the preferred alternative (Alternative H). It also includes a revised air quality screen. The information contained within the *Supplemental Air Quality Analysis* is intended to expand on the air quality information presented in the Draft SEIS and the *Air Quality Technical Support Document* both of which can be viewed on the following BLM website: http://www.mt.blm.gov/eis/mt/milescity_seis/. You may also view the *Supplemental Air Quality Analysis* on the same website.

Copies of the *Supplemental Air Quality Analysis* document are also available for public inspection at the following BLM offices:

Bureau of Land Management
Montana State Office
5001 Southgate Drive
Billings, Montana 59107

Bureau of Land Management
Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301

You are encouraged to comment on the material contained within the Supplemental Air Quality Analysis document. A 90-day comment period will begin the day the document is filed by EPA in the *Federal Register* (anticipated December 14, 2007). Submitted comments will be responded to in the Final SEIS if received within the 90-day comment period. Comments may be submitted by mail to the following address:

Draft SEIS Air Comments, Bureau of Land Management, P.O. Box 219, Miles City, Montana 59301. Comments may also be faxed to: (406) 233-2921 or submitted at the BLM's webpage.

After gathering and considering comments on the *Supplemental Air Quality Analysis*, BLM will prepare the Final SEIS. In the Final, you will be able to evaluate the BLM's responses to comments made on the Draft SEIS and the *Supplemental Air Quality Analysis*. A 30-day public protest period will be held following the publication of the Final SEIS.

Please retain this copy of the *Supplemental Air Quality Analysis* for future reference. If you have any questions or require additional copies of the document, email: cbng_seis@all-llc.com. We appreciate your interest in the management of the public lands.

Sincerely,

M. Elaine Raper

M. Elaine Raper
Field Manager

ITEM HAS BEEN DIGITIZED

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SUPPLEMENTAL AIR QUALITY ANALYSIS TO THE DRAFT SUPPLEMENT TO THE MONTANA STATEWIDE OIL AND GAS ENVIRONMENTAL IMPACT STATEMENT AND AMENDMENT OF THE POWDER RIVER AND BILLINGS RESOURCE MANAGEMENT PLANS

Bureau of Land Management
November 26, 2007

Recommended by: _____

Jim Sparks, Billings Field Manager

Recommended by: _____

M. Elaine Raper, Miles City Field Manager

Approved by: _____

Gene Terland, State Director, Montana/Dakotas

ITEM HAS BEEN DIGITIZED

Supplemental Air Quality Analysis to the Draft Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans

Lead Agency: U.S. Department of the Interior, Bureau of Land Management (BLM)

Type of Action: Administrative (Supplemental data)

Jurisdiction (Planning Area): The planning area includes BLM-administered lands and minerals in the Powder River RMP Area (Powder River, Carter, and Treasure counties and portions of Big Horn, Custer and Rosebud counties) and the Billings RMP Area (Carbon, Golden Valley, Musselshell, Stillwater, Sweet Grass, Wheatland, and Yellowstone counties and the remaining portion of Big Horn County). The planning area contains about 1,506,011 acres of federally managed surface and 5,009,784 acres of federal mineral estate.

Abstract: In December of 2006, BLM issued the *Draft Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans (Draft SEIS)*. The air analysis conducted for the *Draft SEIS* showed the potential for CBNG project-related activities to have an impact on air quality (particularly to visibility) at certain Class I areas, including the Northern Cheyenne Indian Reservation. The air quality analysis was conducted to determine what level of mitigation was needed to help avoid potential impacts to these Class 1 areas.

The *Supplemental Air Quality Analysis* contains data on five scenarios that were modeled for the planning area. The revised Alternative H scenario was modeled to better determine the direct impacts to air quality from project-related CBNG development. The first and second scenarios are modifications that reflect the differences in how current CBNG development is conducted within the Montana portion of the Powder River Basin versus what was predicted in the *Draft SEIS*. Two additional mitigation scenarios were modeled with data presented on impacts resulting from reduced compression requirements for project CBNG development under the first and second scenarios.

The data contained within the *Supplemental Air Quality Analysis* is intended to augment data contained within the *Draft SEIS*, not replace it.

Supplemental Air Quality Analysis to the Draft Supplement To the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans

Prepared for

U.S. BUREAU OF LAND MANAGEMENT
Miles City Field Office
Miles City, Montana

November 2007

EXECUTIVE SUMMARY

This air quality report was prepared to disclose additional air quality analyses that have been performed for the Bureau of Land Management (BLM) in support of the *Draft Supplemental Environmental Impact Statement (DSEIS) to the Montana Final Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans*. The additional air quality modeling analyses supplement the air quality analyses that were performed and summarized in detail in the *Air Quality Technical Support Document (AQTSD)* (BLM revised 2007) and the DSEIS (December 2006). The *AQTSD* addressed the potential for project related and cumulative air quality impacts resulting from the implementation of three separate alternatives; Alternatives E, F, and H with Alternative H being the preferred alternative. The additional analyses contained in this *Supplemental Air Quality Analysis (SAQA)* address the potential for project related and cumulative air quality impacts resulting from the implementation of Alternative H (Preferred Alternative) and four mitigation scenarios.

The *AQTSD* evaluated potential emissions from Coal Bed Natural Gas (CBNG) related activities by combining project related CBNG development, as outlined in the Reasonably Foreseeable Development (RFD) scenario, with non-project related CBNG development on the Crow and Northern Cheyenne Indian Reservations, as outlined in the Reasonably Foreseeable Future Actions (RFFA) scenario, into one emissions source group. This *SAQA* evaluates these two emissions groups separately to allow for the determination of potential air quality impacts that result directly from project related CBNG activities. Also included are potential air quality impacts from emission sources in Montana (All Montana Source Group), which includes project related CBNG emissions, and cumulative emissions (All Source Group) which includes all emissions sources both project related and non-project related. Information on the potential air quality impacts from specific source groups is contained within Appendix C. Additionally, emission points representing potential emissions from CBNG construction, operations, and maintenance activities were decentralized within each watershed to better represent actual development conditions (locations shown on Figure 3-2). The revised Alternative H and the four mitigation scenarios are described as follows:

- The revised Alternative H consists of adjustments to emission point locations and the separation of RFD and RFFA CBNG wells that were also applied to each of the mitigation scenarios analyzed which are described below. Emission factors used were derived from the air quality modeling analyses conducted for the 2003 Final Environmental Impact Statement (FEIS) conducted by Argonne National Laboratories (Argonne 2002). The air modeling analysis was conducted to separate project RFD emissions from non-project RFFA emissions; decentralize the project RFD and non-project RFFA emission source points; and utilize a well to field compressor to sales compressor ratio of 240 wells connected to 10 field compressors connected to 1 sales compressor (240:10:1) with a NO_X emissions factor for compressors of 1.5 grams per brake horsepower-hour (1.5 g/bhp-hr). This scenario is referred to in this *SAQA* as Alternative H Revised.

- Current CBNG development within the Montana portion of the Powder River Basin (PRB) is conducted using a ratio of 200 wells connected to 5 field compressors connected to 1 sales compressor. This *SAQA* includes an air modeling analysis scenario which uses this ratio of 200:5:1 and a NO_X emissions factor for compressors of 1.5 g/bhp-hr for project RFD wells; the well to field compressor to sales compressor ratio for non-project RFFA wells was not adjusted. This scenario is referred to in this *SAQA* as Scenario 1.
- This *SAQA* evaluates a mitigation scenario (Scenario 1A) which assumes a 50% reduction applied to Scenario 1 compressor horsepower requirements. This scenario reduces compressor operations emissions and associated maintenance emissions by 50% but leaves all other emissions the same as previously modeled for Scenario 1. The effect of this assumption reduces calculated compressor emissions by 50% for NO_X, SO_2, PM_{10}, and $PM_{2.5}$.
- This *SAQA* also evaluates an air modeling analysis scenario (Scenario 2) using the 200:5:1 well to field compressor to sales compressor ratio and the NO_X emissions factor of 1.0 g/bhp-hr for project RFD wells; the NO_X emissions factor for non-project RFFA wells was not adjusted. The 1.0 g/bhp-hr NOx emission factor was selected for Scenario 2 to reflect the emission level currently being permitted by the Montana Department of Environmental Quality (MDEQ) for CBNG compressors within the PRB. Scenarios 1 and 2 utilize the same number of operating CBNG wells and the same number of compressors and horsepower requirements but would have varying NO_X emissions based on different NO_X emissions factors for the two scenarios. The NO_X emissions factor for Scenario 2 reflects current MDEQ permitting levels.
- This *SAQA* evaluates a second air quality mitigation scenario (Scenario 2A) which assumes a 50% reduction applied to the Scenario 2 compressor horsepower requirements. This scenario reduces compressor operations emissions and associated maintenance emissions by 50% but leaves all other emissions the same as previously modeled for Scenario 2. The effect of this assumption reduces calculated compressor emissions by 50% for NO_X, SO_2, PM_{10}, and $PM_{2.5}$.
- This *SAQA* also includes revised emissions data for the Tongue River Railroad (TRR) which was reconfigured to better simulate a linear emission source. The total emissions for the TRR were kept constant and are the same as presented in the *AQTSD*; however, the number of emission points representing the TRR alignment was increased from 20 to 96.

Project related emissions include emissions from CBNG construction and operations activities in Montana. The scenarios presented within this *SAQA* were analyzed to assess project related versus non-project related CBNG emissions under Revised Alternative H, assess emissions associated with compressor operations utilizing different NO_X emissions factors and adjusting well to field to sales compressor ratios to more accurately represents current practice within the Montana portion of the PRB under Scenarios 1 and 2, and assess at what level project related CBNG emissions would need to be reduced to achieve zero days of impacts to visibility at the Prevention of Significant Deterioration (PSD) Class I areas under Scenarios 1A and 2A.

These analyses utilized the CALMET and CALPUFF models to assess the potential for impacts from project related and non-project related cumulative air emissions of PM_{10}, $PM_{2.5}$, NO_X, and SO_2 on air quality and air quality related values (AQRVs) at near-field receptor locations within the PRB and far-field receptor locations within the modeling domain. Far-field receptor locations consist of PSD Class I and Class II areas (locations shown on Figure 3-1).

Results of these analyses show that project related CBNG activities would not have the potential to exceed the National Ambient Air Quality Standard (NAAQS) or Montana Ambient Air Quality Standard (MAAQS) for NO_2, PM_{10}, $PM_{2.5}$, or SO_2 under any of the scenarios evaluated at either near-field or far-field receptors or NO_2, PM_{10}, or SO_2 prevention of significant deterioration (PSD) increments.

Visibility impacts to Class I and Class II areas were evaluated using the Federal Land Managers Air Quality Related Values Workgroup (FLAG) Method 2 and the Regional Haze Rule Method 6. Method 6 results are presented as consistent with the Best Available Retrofit Technique (BART) guideline. Utilizing Method 6, visibility impacts were evaluated for select Class I and Class II areas within the modeling domain. Visibility impacts were evaluated for the designated Class I Northern Cheyenne Indian Reservation because of it's proximity to proposed development. Using Method 6, visibility impacts to the Northern Cheyenne Indian Reservation consisted of 19 days for Scenario 1, zero days for Scenario 1A, 7 days for Scenario 2, and zero days of visibility impacts under Scenario 2A. As a result, BLM has modified the Air Quality Screen for Alternative H (Preferred Alternative) to more proactively track development and assess potential impacts with respect to CBNG project related development to mitigate potential visibility impacts before any days of visibility impacts occur from project related development to nearby Class I areas; in particular the Northern Cheyenne Indian Reservation.

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Acronyms and Abbreviations

Δdv	change in deciview
ADY	Alternative Development Year
ANC	acid neutralizing capacity
APD	Application for Permit to Drill
AQRV	Air Quality Related Value
Argonne	Argonne National Laboratory
ARM	Air Resources Management Bureau
BACT	Best Available Control Technology
BER	Board of Environmental Review
BIA	Bureau of Indian Affairs
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
BTU	British thermal unit
CAA	Clean Air Act
CBNG	coal bed natural gas
DEIS	Draft Environmental Impact Statement
dv	deciview
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FLM	Federal land managers
FLPMA	Federal Land Policy and Management Act
FR	Federal Register
HAP	hazardous air pollutants
MAAQS	Montana Ambient Air Quality Standards
MDEQ	Montana Department of Environmental Quality
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
PM_{10}	particulate matter less than 10 microns in diameter (inhalable particulate matter)
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter (fine particulate matter)
ppm	parts per million
PRB	Powder River Basin
PSD	Prevention of Significant Deterioration
RFFA	Reasonably Foreseeable Future Actions
RFD	Reasonably Foreseeable Development
RMP	Resource Management Plan
SEIS	Supplemental Environmental Impact Statement
SO_2	sulfur dioxide
$\mu g/m^3$	micrograms per cubic meter
VOC	volatile organic compounds
VMT	vehicle miles traveled
WAAQS	Wyoming Ambient Air Quality Standards
WYDEQ	Wyoming Department of Environmental Quality

1.0 Introduction

This Supplemental Air Quality Analysis (SAQA) supplements the Air Quality Technical Support Document (AQTSD) (BLM revised 2007) that was prepared in support of the Draft Supplemental Environmental Impact Statement (DSEIS). This SAQA uses emission factors derived from data developed for the 2003 Final EIS (FEIS) air quality model (Argonne 2002). Emissions inventory data obtained from state regulatory agencies which were used within the air model are included within Appendix C of the AQTSD.

This report addresses changes in air quality and air quality related values resulting from a reconfiguration of emission sources for the coal bed natural gas (CBNG) development in Montana. The reconfiguration includes a revision to source locations and an adjustment of emissions factors associated with nitrogen oxide (NOx) emissions from project related CBNG sources. The information in this document focuses on potential air quality impacts in the Montana near-field receptors and at receptors within the Northern Cheyenne Indian Reservation and the Crow Indian Reservation. Tabular summaries are provided in this discussion to compare impacts from the AQTSD and from the reconfigured production and emissions scenarios. The air quality modeling results for the full set of receptors (see Section 3.4) are provided in Appendix C of this document.

The AQTSD evaluated three separate development scenarios, Alternatives E, F, and H, with Alternative H being the preferred alternative. This report evaluates five additional emission scenarios related to Alternative H. The air quality evaluation of these scenarios was conducted to identify potential changes in air quality impacts and is the main objective of this study. For a more detailed review of the modeling options and technical approach, the reader is referred to the AQTSD (ALL 2007) that summarizes the modeling approach, non-project emissions data, and impacts that are generally below any thresholds of concern.

Identical to the original AQTSD, this study assesses potential impacts at "near-field receptor grids" in both Wyoming and Montana and at the individual sensitive receptor areas as well. The impacts were evaluated for the same receptor set that was used in the Coal Review (ENSR 2005), using the same dispersion model and receptor data. The near-field potential impacts refer to receptors in the Powder River Basin, near the projected development. Generally, those receptors are within 50km of the development area. This study includes an assessment of potential impacts at all receptor groups on ambient air levels of nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter with aerodynamic diameter of 10 microns or less (PM_{10}). The selected hazardous air pollutants (HAPs) analyses have not been redone because there are no expected changes in those impacts. The HAPs were evaluated at the near-field receptors in Montana and Wyoming, but not at the sensitive receptor areas. At the sensitive receptor areas, potential impacts on visibility and acid deposition were also evaluated.

2.0 Revised Air Quality Screen (Preferred Alternative)

The MDEQ has permitting authority over emission sources. EPA has permitting authority in the adjacent areas of Indian Country. The BLM would conduct an annual review of available monitoring data

collected in Class I areas (designated Northern Cheyenne Indian Reservation) and Federally mandated Class I areas (wilderness areas) within the Montana portion of the Powder River Basin.

In addition, the MDEQ has agreed to complete an annual cumulative air quality impact model to track air quality impacts of CBNG development, including relevant CBNG development in Wyoming (see description of Additional Air Quality Modeling Studies in Chapter 3 of the Draft SEIS).

If observed effects and modeled impacts completed for the annual review by MDEQ show state or federal regulatory standards or applicable thresholds for air quality related values would be exceeded, the BLM would require additional mitigation measures on development. The BLM would approve additional CBNG Application for Permits to Drill (APDs) only if it could be demonstrated that they would not contribute to the exceedances of air standards.

To minimize potential air impacts from CBNG operations, the number of wells connected to each compressor would be maximized, and natural-gas-fired or electrical compressors or generators would be required. When compressors or generators are located in proximity to noise sensitive areas (such as occupied dwellings or sage-grouse strutting grounds), a maximum noise level of 50 decibels (10 decibels above background measured at the sage-grouse lek) measured 0.25 mile from the compressor would be required.

To reduce dust, operators of federal leases would have to post and enforce speed limits for their employees and contractors. Operators could work with local government to use dust suppression techniques on roads.

Visibility and Haze –
There is a level of uncertainty regarding the total number of wells that would be permitted and operated during the life of this project, as well as some uncertainty associated with several other factors that affect the calculation of visibility impacts. The reasonable foreseeable development scenario of 18,225 project wells drilled is based on data delineating the extent of economically productive coalbeds and the high-end of a range of wells that are predicted. This development scenario assumes that virtually every 80-acre spacing unit within geologic limits of the PRB would have wells drilled, and 90% of those wells would be productive. However, the reasonable foreseeable development scenario of Alternative G (6,470 total wells drilled) may be the limit of productive CBNG reservoirs in the MT PRB. The most likely scenario is somewhere between Alternative G and the Alternative H. However, consistent with the analysis completed for other resource issues, potential visibility impacts from the high-end development scenario were modeled, and these results would guide BLM's long-term approach for applying the air quality screen.

Given the potential for the level of development to vary, BLM and MDEQ would perform additional visibility modeling to better assess the visibility impacts as development proceeds (e.g., when exploration programs help define the limits of development within the Montana portion of the Powder River Basin). The potential for project wells to impact visibility is due to emissions of sulfur dioxide and oxides of nitrogen from compressor engines. The total potential for

emissions of oxides of nitrogen from compressor engines is based on horsepower requirements, which for the high-end development scenario of 18,225 project wells drilled would be 297,680 horsepower. The visibility modeling would be performed when horsepower requirements for CBNG wells in the Montana portion of the PRB exceed 133,956 horsepower (based on a compressor NO_X emission factor of 1.5 g/bhp-hr). Current modeling results indicate 0 days of visibility impacts would occur on the Class I Northern Cheyenne area up to a horsepower level of 148,840. BLM has selected 90% of this value as the visibility screening threshold to ensure appropriate actions can be taken in time to mitigate visibility impacts, if needed. The Class I Northern Cheyenne Indian Reservation area was selected as the "trigger Class I area" due to its proximity to the CBNG development, and the sensitivity to CBNG development of this Class I area when compared to other Class I areas in the region.

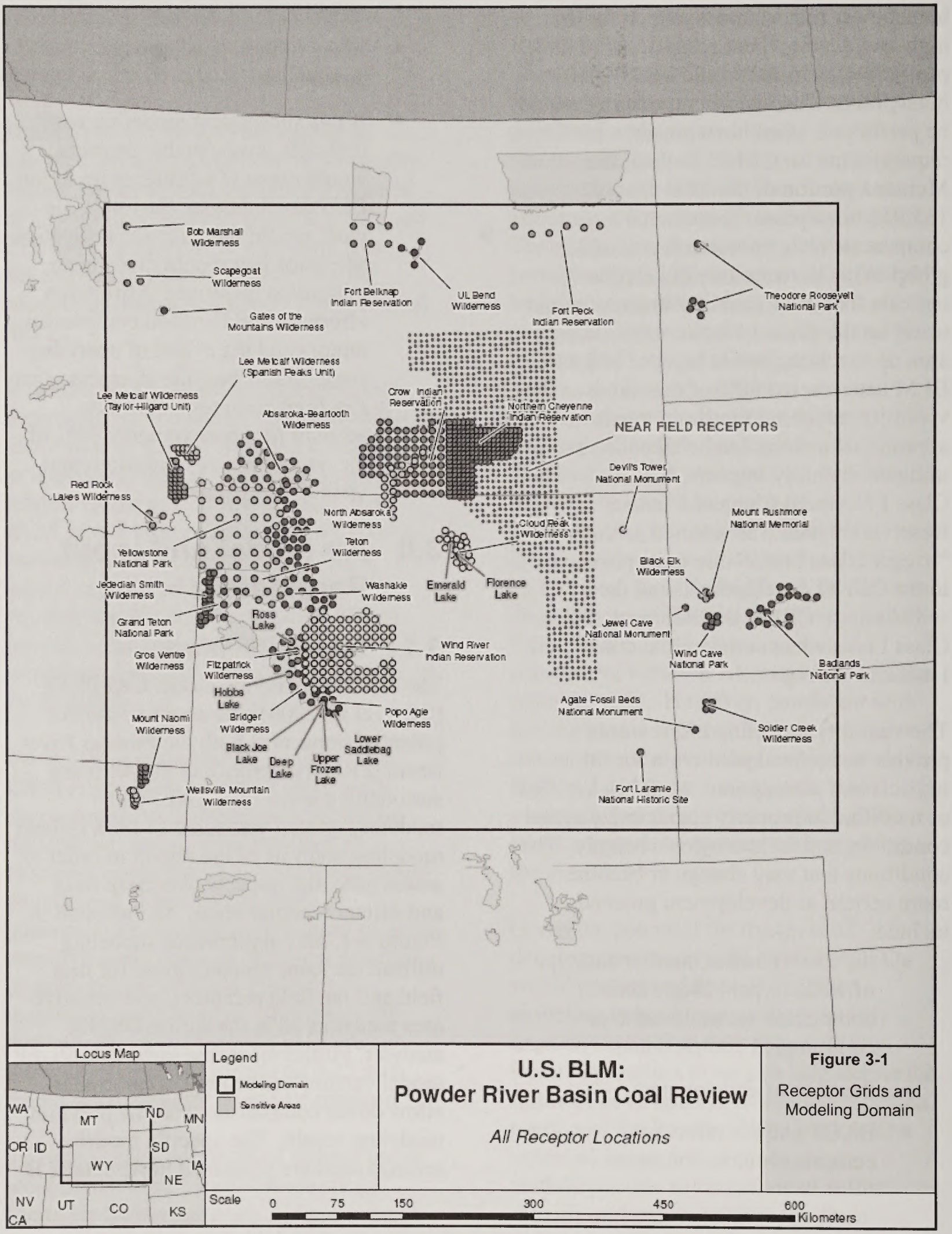
The visibility modeling effort would provide an updated prediction for future impacts and assumptions would be verified or modified to properly characterize actual conditions and technological changes. The conditions that may change or become more certain as development proceeds include:

- the total ultimate number and type of wells (type – single zone completion vs. multi-zone or commingled completions),
- the pace of development,
- BACT and the effect on compressor emission rates ,
- compressor locations,
- compressor to well ratios, and
- limits of high development potential areas
- If this subsequent modeling work indicates unacceptable impacts would occur at a future point in the PRB development, the modeling work would then include mitigation scenarios that would investigate mitigation measures. Mitigation efforts would focus on compressor motors and the extent of operating compressors because it appears that gas-fired compressor motors account for approximately 90% of the overall project emissions and visibility impacts.

3.0 Air Model and Input Parameters

3.1 CALPUFF Model

The USEPA guideline model CALPUFF (Scire, et al. 2000) was used to estimate potential impacts at both the Powder River Basin (PRB) receptors and the sensitive surrounding areas. The CALPUFF modeling system was selected for a refined modeling analysis of the region in order to assess potential impacts over near-field and distant receptor areas. As indicated in Figure 3-1, the supplemental modeling utilized the same receptor grids for near field and far-field receptors, and sensitive area receptors as in the earlier DSEIS analysis. Furthermore, the same CALPUFF model version and settings were used to allow direct comparison with the previous modeling results. The specific model settings used are contained in Appendix B.



U.S. BLM:
Powder River Basin Coal Review

All Receptor Locations

Figure 3-1

Receptor Grids and Modeling Domain

The CALPUFF modeling system has three main components:

- CALMET - a diagnostic three-dimensional meteorological model, which develops the meteorological data for modeling input;
- CALPUFF - the transport and dispersion model that carries out calculations of dispersion;
- CALPOST - a post processing package that is used to depict overall concentrations and potential impacts.

The CALMET input files were initially developed for the DSEIS from the regional MM5 data base for 2001, 2002, and 2003. All three years were used to develop the potential impacts for the base year (2004 emissions). The study first analyzed the potential impacts for all three years for the base year, focusing on potential impacts in the near-field. A comparison of the potential impacts from those three years concluded that the year 2002 would provide the highest potential impacts in the near-field. For each of the DSEIS development scenarios, the potential impacts were then analyzed using only 2002 meteorological data. The supplemental air modeling analysis scenarios and revised Tongue River Railroad included the same 2002 meteorological data set as used for the DSEIS.

The CALPUFF modeling system is designed to treat the time-varying point and area source emissions, model domains at distances from tens of meters to hundreds of kilometers from the sources; predict averaging times from 1 hour to 1 year; predict impacts for inert pollutants that are not chemically changed in the atmosphere; predict potential impacts of pollutants that may be subject to removal and chemical conversion mechanisms; and be applied to rough terrain situations. Given these strengths and the objectives of the study, the CALPUFF model is aptly suited to carrying out the required atmospheric dispersion modeling.

3.2 Emissions Input

The analysis focuses on a revision of operations and emissions associated with Alternative H (ALL 2007), including separate scenarios for evaluation. The supplemental evaluation initially addressed some inconsistencies with the modeling results for the original (Argonne 2003) TSD for the Statewide FEIS.

Consistency with Original Statewide FEIS

In order to maintain consistency with previous air modeling conducted by Argonne National Laboratory (Argonne) for the 2003 FEIS, the calculation tables presented for the preferred Alternative E Coal Bed Natural Gas (CBNG) and Conventional Oil & Gas (ONG) development in Appendix B of the 2002 Argonne Technical Support Document were recreated utilizing the same data and assumptions provided to Argonne by BLM and other cooperating agencies. In most cases, the calculations were reproduced based on formulas presented within annotations to the tables. In the case of vehicular particulate matter emissions, the formula presented did not produce the emission factor that was shown in the table. In this case, the value used for the Argonne model was inserted as a numerical value rather than as a calculation to maintain consistent results between this model and the model conducted by Argonne. The results of the recalculation effort in comparison to the original

Argonne project emissions estimation are show in Table 3-1. Appendix A contains data tables used to prepare the emission calculations for each of the scenarios described within this report.

Modifying the Reproduced Argonne Spreadsheets to Provide Alternative H Emissions Estimates

As noted above the Alternative H was proposed as the preferred alternative, and this effort addresses revised impacts from that alternative. Following the resolution of differences with the Argonne results, the emission sources were modified to reflect the anticipated rate of development for the preferred Alternative H. One of the modifications was the removal of anticipated CBNG and Conventional ONG wells in Park, Blaine, and Gallatin Counties which were included in the 2003 FEIS, but are no longer in the planning area for the Powder River and Billings Resource Management Plans. The changes made to the Argonne CBNG spreadsheets included the following:

- Reducing the number of CBNG wells drilled from 18,266 to 18,225
- Reducing the number of well pads from 6089 to 6075
- Adjusting the ratio of CBNG wells to field compressors and sales compressors to 240:10:1
  - This resulted in decreasing field compressors from 741 to 673, and sales compressors from 76 to 67
- Reducing the number of impoundments from 357 to 356
- Reduced the Total Gas Produced (MMCFD-YR) from 45,728 to 44,944
- Reducing the Total Number of Operating Station-Year for both field compressors and sales compressors
  - This resulted in a reduction from 8,989 to 7,299 for field compressors and 1,084 to 730 for sales compressors
- Reduced the Total Number of Operating Well-Years from 228,640 to 175,181

The changes made to the Argonne ONG spreadsheets included the following:

- Reducing the number of ONG wells from 1,855 to 1,730
- Reduced the Total Number of Operating Well-Years from 20,982 to 19,644
-

Table 3-1
Total CBNG and Conventional Oil & Gas Project Emissions (ton/project[1])

	NOx	PM10	PM2.5	SO2	CO	VOCs
Argonne	120,780	14,956	6,775	4,094	91,954	46,630
Recalculation	120,772	14,958	6,773	4,096	91,948	46,623
Difference	-8	+2	-2	+2	-6	-7

1 ton/project = total emissions for the 20 year life of the project related CBNG development.

All other changed values within the revised CBNG and ONG spreadsheets are calculated values based upon the above changes. Table 3-2 presents the total project emissions estimations for development under Alternative H used in the DSEIS and the newly recalculated emissions estimations from the recreated Argonne spreadsheets.

The decreases in emissions that can be seen in Table 3-2 are due to reduction in number of wells, removal of RFFA wells, and removal of a second set of construction and maintenance emissions inadvertently counted twice in the development of the per well emission factors used to calculate DSEIS emissions.

Distribution of Total Project Emissions Over the 20-Year Development Period for Alternative H

Once total project emissions were developed, the CBNG emissions were distributed to each development year by taking the rate of development for Alternative H CBNG presented in the Minerals Appendix of the DSEIS. Construction emissions were divided by the total number of wells and then multiplied by the number of wells to be constructed within a particular year. Operation emissions were obtained by calculating the total number of well years, dividing the total project operation and maintenance emissions by the total number of well years, and then multiplying this derived value by the number of wells operating within a particular year. A similar procedure was used to distribute Alternative H Conventional ONG emissions over the project period of development. The Alternative Development Year (ADY) 20 emissions are presented in Table 3-3 for the Argonne FEIS model, the DSEIS model, and the recalculated DSEIS emissions for the remodeling effort.

Table 3-2
Total Alternative H CBNG and Conventional Oil & Gas Project Emissions (ton/project[1])

	NOx	PM10	PM2.5	SO2	CO	VOCs
DSEIS	127,347	31,825	-----	3,655	-----	115,549
Recalculation	100,505	13,509	5,895	3,878	73,248	35,745
Difference	-26,842	-18,316		+223		-79,804

1 ton/project = total emissions for the 20 year life of the project related CBNG development.

Table 3-3
Alternative H CBNG and Conventional Oil & Gas Project Emissions for ADY 20 (tons)

	NOx	PM10	PM2.5	SO2	CO	VOCs
Argonne (Alt E)	6,956	564	326	88	6,692	3,454
DSEIS	9,734	2,275	-----	231	-----	9,882
DSEIS Recalc.	6,909	706	363	122	6,199	3,162

Distribution of ADY 20 Emissions to Modeling Point Source Locations

To reduce the potential for model induced overestimation of impacts, CBNG source point locations were redefined to be consistent with known coal reserves and known conventional oilfields. Thus, to be consistent with the development of CBNG wells by watershed and by County as described in the Minerals Appendix of the DSEIS it was decided to increase the number of points by assuming that each point would represent approximately 100 CBNG wells (i.e. for 18,225 wells, there are approximately 180 points). The rational for the placement of emission points is as follows:

CBNG Project Emission Points: These emissions points were placed within 4th order watersheds based on the predicted number of wells in the DSEIS as per Tables 4-1 (Chapter 4, page 4-5) and Table 4-40 (Chapter 4, page 4-94) and in areas with existing known sub-bituminous coals. The points were placed within known existing PODs, and concentrated (southern Big Horn and Powder River counties) where multiple coal seams are known to exist. The tables were generated from the predicted wells within the RFD Minerals Appendix Table MIN-1 (page MIN-25) per county. Emission points were used to represent approximately 100 wells each as a baseline, but adjusted to reflect county limits or watershed limits. Hence, the only point in Treasure County represents the 25 wells predicted for this county and the other 16 points within the Yellowstone-Sunday watershed represent either 104 or 105 wells to get the total to 1700 as was predicted for the watershed.

RFFA CBNG Emission Points: These emission points were placed evenly throughout the reservation where sub-bituminous coal seams are known to exist since the actual areas where the tribes may develop are not known at present. Both the Northern Cheyenne and Crow Indian reservation have 40 points representing 4,000 wells. The two points in the Ashland Ranger District were placed in the south portion to represent the estimated 200 wells that may be developed. The thought was that they would be closer to existing infrastructure.

Conventional Oil and Gas Emission Points: These points were placed within known existing oil and gas fields and represent the number of conventional wells predicted within the RFD for each county. A point was placed in each existing field per watershed, so if a field is located within two watersheds but within one county there are two points and each one is assigned a representative number of wells based on the size of the field in the watershed as compared to the whole field size.

A map showing all modeling source point locations is provided in Figure 3-2.

The distribution of project CBNG emissions for ADY 20 were divided by the total number of operating wells in ADY 20, and then the derived values were multiplied by the number of wells represented by each point. For construction emissions, the total construction emissions for ADY 20 were distributed equally among the modeling source points. This same approach was used to distribute Conventional ONG emissions.

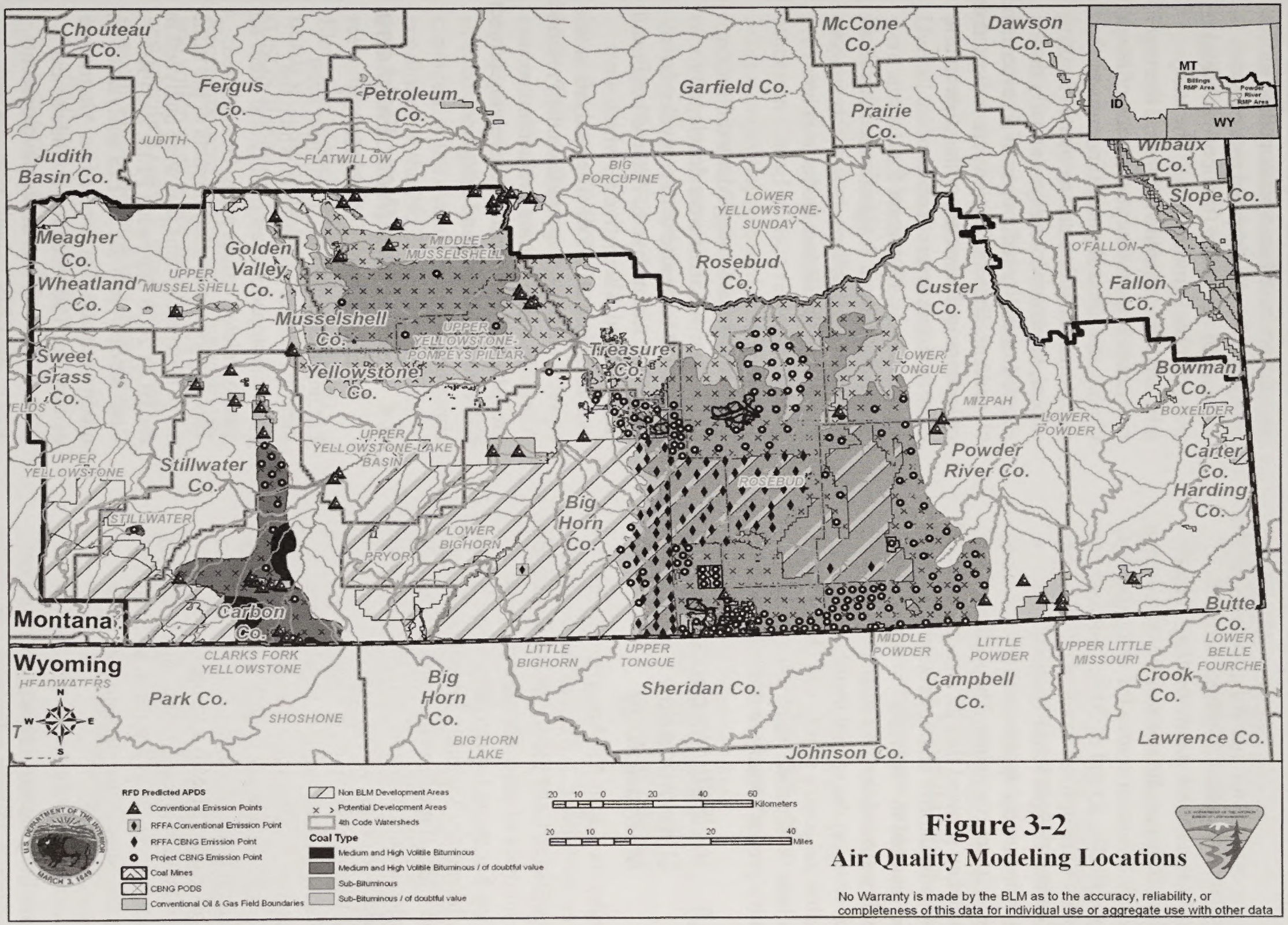


Figure 3-2
Air Quality Modeling Locations

No Warranty is made by the BLM as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data

Tongue River Railroad

In the original air modeling analysis for the DSEIS, the spatial distribution of individual source points for the Tongue River Railroad did not suitably represent a mobile emission source for a railroad line. Specifically, a total of 20 emission source points were utilized to simulate emissions from the Tongue River Railroad line; emissions were apportioned to each of these 20 source points. The results of that modeling showed that 20 source points did not satisfactorily characterize a line source and resulted in "hotspots" of impacts to air quality around the 20 source points For this revision the spatial distribution of individual source points was changed to include 96 separate point sources, each with a proportionally revised emission rate.

3.3 Visibility Impacts Determination Methodology

Under the Clean Air Act, visibility has been established as a critical resource for identified Class I areas. The study provides an analysis of potential impacts at the Class I areas and at sensitive Class II areas in the region. Visibility impacts to Class I and Class II areas were evaluated using the Federal Land Mangers Air Quality Related Values Workgroup (FLAG) Method 2 and the Regional Haze Rule Method 6. A detailed discussion of these alternate methods is provided in the original analysis. Fundamentally, Method 2 is the Federal Land Managers Air Quality Workgroup (FLAG) approach (USEPA 2000) and Method 6 is the current method preferred for BLM analyses, and is used for the compliance demonstration for Regional Haze.

Visibility potential impacts are based on the highest 24-hour calculated extinction at the indicated source receptors. Potential impacts are based on a presumed pristine background and calculated as a percent increase in extinction (reduced visibility) from that background value. The study tabulated the reduced visibility at the maximum impact receptor in each of the Class I and Class II groups in terms of the maximum reduction on any one 24-hour period, the number of days annually that showed visibility reductions of 5 percent and 10 percent. These reductions are indicated as reductions in deciviews, with 1.0 deciview corresponding to a reduction of approximately 10 percent from the background level. A significance threshold of 10 percent has been used in this analysis to evaluate the impact from the source groups.

Visibility impacts using Method 6 for the listed sensitive areas were developed for each of the three alternative development scenarios: Alternative E; Alternative F; and the Preferred Alternative H, which were evaluated in the DSEIS. The analysis in this report focuses on impacts from the Preferred Alternative H. Separate evaluations were provided for five scenarios involving project CBNG construction and operation emissions.

3.4 Receptors (Near Field and Sensitive Receptors)

For any modeling run, the project must identify a set of receptors at which the potential impacts to air quality and other air quality related values are to be analyzed. This analysis evaluated impacts at the same set of receptor groups that were analyzed in the BLM 2003 Statewide FEIS, the PRB Coal Review, and the DSEIS analysis of air quality impacts that focused on Alternative evaluation. The receptors include a near field set of receptors in the development area of the PRB, in both Montana and

Wyoming, and they include receptors at the air quality designated Class I areas, and at specific other receptor areas within the region.

Figure 3-1 provides a depiction of the modeling domain as well as each of the receptor areas. In the near-field receptor grid, any receptor that was within 1 km of a source was eliminated from the analysis. This avoids over-predicting impacts due to a single source or characterization that affects air quality near any single receptor. Overall the near-field receptor grid points were spaced at 1-km intervals over the study area. At the Class I and other areas, receptor grids were used based on the data provided by the National Park Service. At other non-Class I areas, a receptor grid of 3-km was developed based on digital topographic data. Figure 3-1 depicts the receptors at each sensitive area, and includes the sensitive lakes that have been identified by the Forest Service.

Near-field receptors were arranged to obtain the maximum estimated concentrations that result from CBNG development within the PRB. The purpose of establishing the near-field receptors is to characterize the overall air quality conditions in the PRB as a result of this development. The elevation of each receptor was obtained from the Digital Elevation Model data for the 1:250,000 quads with 90-meter horizontal resolution (USGS 2000a).

Receptors were located along boundaries and within each of the following Class I and specified Class II sensitive areas of concern within the modeling domain:

- Badlands National Park
- Wind Cave National Park
- Bridger Wilderness Area
- Fitzpatrick Wilderness Area
- Washakie Wilderness Area
- North Absaroka Wilderness Area
- Northern Cheyenne Indian Reservation (Class 1, Northern Cheyenne Tribal Council)
- Devils Tower National Monument
- Mount Rushmore National Memorial
- Jewel Cave National Monument
- Agate Fossil Beds National Monument
- Fort Laramie National Historic Site
- Black Elk Wilderness Area
- Soldier Creek Wilderness Area
- Cloud Peak Wilderness Area
- Yellowstone National Park
- Grand Teton National Park
- Teton Wilderness Area
- Absaroka Beartooth Wilderness Area
- Bighorn Canyon National Recreation Area
- Popo Agie Wilderness Area
- Crow Indian Reservation (Class II Crow Tribal Council)
- Theodore Roosevelt National Park

The following areas are near the edge of the modeling domain. Modeled impacts at receptors within these areas near the edge of the modeling domain might be associated with model inaccuracies and uncertainties due to edge effects of the modeling. Therefore, estimates of potential impacts to these areas near the edge of the modeling domain were made by placing representative receptors no nearer than 25 km from the edge of the modeling domain:

- Bob Marshall Wilderness Area
- Gates of the Mountains Wilderness Area

- Lee Metcalf Wilderness Area, Spanish Peaks Unit
- Lee Metcalf Wilderness Area, Taylor Hillgard Unit
- Red Rock Lakes Wilderness Area
- Jedediah Smith Wilderness Area
- Mount Naomi Wilderness Area
- Wellsville Mountain Wilderness Area
- U.L. Bend Wilderness Area
- Fort Peck Indian Reservation
- Scapegoat Wilderness Area
- Fort Belknap Indian Reservation.

These locations, as well as other sensitive receptors such as lakes, are shown in Figure 3-1. The receptors were determined with sufficient accuracy to assure that the maximum potential air quality impacts are evaluated. All sensitive receptors were identified and reviewed in the modeling protocol by the stakeholder group, prior to initiating the modeling

4.0 Baseline (Existing Environment) Analysis

The base year air quality analysis was conducted under the original study, and the input data and results have not changed since that analysis. The existing emissions were based on data for 2004, using actual data where available and potential emissions in lieu of actual data. Emissions from conventional oil and gas operations were adjusted by a factor (0.7) from the permitted levels to represent actual operations and to account for sites that were permitted but never installed. A summary of emissions data for the base year is provided in Appendix A.

The original analysis included the full range of near field receptors in Montana and Wyoming, as well as the Class I and sensitive Class II areas in both states and in North and South Dakota. This report also included an analysis of the same area but focuses on providing data on changes that occurred at sites near the CBNG development in Montana; the results of the baseline study are provided in Tables 4-1 to 4-4. Data is presented within these tables for project related CBNG emissions (MT CBNG Construction and MT CBNG Operations), emissions from sources located in Montana which include project related CBNG emissions (All MT), and emissions from all sources which also includes project related CBNG emissions (ALL Sources). The modeled air quality impacts for each receptor area are included in Appendix C. Additional information on base year results is presented within Section 3 of the AQTSD (BLM revised 2007).

Overall the base year modeled results showed some impacts above applicable air quality standards from existing major sources in Montana; however these sources are not related to CBNG development or operation. Air quality impacts from project related CBNG sources are all within applicable air quality standards.

4.1 Potential Air Quality Impacts

The results of the air quality modeling for the base year presented in Table 4-1 show that all model predicted impacts from each source group category would be below applicable regulatory threshold levels at the near-field, the Crow Indian Reservation, and the Northern Cheyenne Indian Reservation receptor grids. The impacts from the CBNG construction and operation sources are well below the applicable standard. In addition,

all impacts are below the federal annual NO_2 standard.

4.2 Potential Visibility Impacts

Visibility modeling results for the base year are provided in Tables 4-2 for "Method 2" and Table 4-3 for "Method 6." The results showed impacts from existing sources at most of the identified receptor groups. The impacts from CBNG construction and operation, however, were much less.

Method 2 results showed only 1 day with impacts above 10% of background at the Northern Cheyenne Indian Reservation, for both construction and operation. The model also predicted 2 days with impacts above 10 % at the Crow Indian Reservation and 1 day above 10% at the Cloud Peak Wilderness Area.

Method 6 results showed no days above the 10% impact at any of the receptor groups. The highest levels were 9.5% at the Northern Cheyenne Indian Reservation and 7.2% at the Crow Indian Reservation. Further the critical Method 6 parameter is the 8th highest value in the year, and all the predicted levels are well below the 5% significance threshold for this analysis.

4.3 Acid Deposition

All modeled deposition rates for sulfur and nitrogen from CBNG construction and operation are below 0.1 kilograms per hectare per year. See Table 4-4 for potential modeled deposition for nitrogen and sulfur for the base year. This modeled impact is also well below the threshold deposition rate of 3 kg/hectare-year for nitrogen and 5 kg/hectare-year for sulfur compounds.

Table 4-1 Modeled Concentrations of NO2, PM10, PM2.5 and SO2 for BASE YEAR

Receptor Set	Pollutant	Averaging Period	RANK	MT CBNG Construction	MT CBNG Operation	ALL MT	ALL SOURCES	NAAQS/ MAAQS ($\mu g/m^3$)
NEAR FIELD RECEPTORS								
Montana Near Field Receptors	NO_2	1-Hr	1ST HIGH	122	200	322	428	565
		ANNUAL	1ST HIGH	0	1	1	4	100
	PM_{10} Total	24- Hr	2ND HIGH	3	3	31	31	150
		ANNUAL	1ST HIGH	0	0	2	4	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	0	1	2	7	35
		ANNUAL	1ST HIGH	0	0	0	1	15
	SO_2	1-Hr	1ST HIGH	11	5	140	140	1300
		3- Hr	2ND HIGH	3	1	44	44	1300
		24- Hr	2ND HIGH	0	0	15	15	260
		ANNUAL	1ST HIGH	0	0	2	2	60
CLASS I AREAS								
North Cheyenne IR Class I Area	NO_2	1-Hr	1ST HIGH	4	6	11	13	565
		ANNUAL	1ST HIGH	0	0	0	0	100
	PM_{10} Total	24- Hr	2ND HIGH	0	0	2	7	150
		ANNUAL	1ST HIGH	0	0	0	1	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	0	0	1	6	35
		ANNUAL	1ST HIGH	0	0	0	0	15
	SO_2	1-Hr	1ST HIGH	0	0	16	16	1300
		3- Hr	2ND HIGH	0	0	7	10	1300
		24- Hr	2ND HIGH	0	0	2	4	260
		ANNUAL	1ST HIGH	0	0	0	1	60
SENSITIVE CLASS II AREAS								
Crow IR Class II Area	NO_2	1-Hr	1ST HIGH	14	23	462	462	565
		ANNUAL	1ST HIGH	0	0	2	2	100
	PM_{10} Total	24- Hr	2ND HIGH	0	0	47	47	150
		ANNUAL	1ST HIGH	0	0	4	4	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	0	0	3	7	35
		ANNUAL	1ST HIGH	0	0	0	1	15
	SO_2	1-Hr	1ST HIGH	1	1	151	151	1300
		3- Hr	2ND HIGH	0	0	61	61	1300
		24- Hr	2ND HIGH	0	0	15	15	260
		ANNUAL	1ST HIGH	0	0	2	3	60

Notes:
(1) Bold type with shading indicates a modeled impact that is above the NAAQS/MAAQS
(2) Includes 75% NO_X to NO_2 conversion
(3) Concentrations in Micrograms per cubic meter.

Table 4-2 Visibility Impacts - Method 2 - Base Year

Receptor Set	MT CBNG Construction			MT CBNG Operation			ALL MT			ALL SOURCES		
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}
	5%	10%		5%	10%		5%	10%		5%	10%	
CLASS I AREAS												
Badlands NP	0	0	0.1	0	0	0.2	62	25	43	249	183	358
Bob Marshall W	0	0	0.0	0	0	0.0	23	13	59	30	19	71
Bridger W	0	0	0.3	0	0	0.5	41	28	68	207	146	840
Fitzpatrick W	0	0	0.3	0	0	0.5	41	22	82	152	99	554
Fort Peck IR	0	0	0.1	0	0	0.2	64	37	51	133	94	364
Gates of the Mountain W	0	0	0.0	0	0	0.0	61	33	81	76	45	121
Grand Teton NP	0	0	0.1	0	0	0.1	52	25	46	168	100	223
N. Absaorka W	0	0	0.3	0	0	0.5	105	54	93	160	101	407
North Cheyenne IR	3	1	10	7	1	15	209	113	90	298	235	416
Red Rock Lakes	0	0	0.0	0	0	0.0	49	25	36	91	49	77
Scapegoat W	0	0	0.0	0	0	0.0	35	24	122	47	33	173
Teton W	0	0	0.1	0	0	0.2	59	32	116	167	107	407
Theodore Roosevelt NP	0	0	0.2	0	0	0.2	65	32	59	198	143	440
UL Bend W	0	0	0.1	0	0	0.2	67	25	44	106	62	152
Washakie W	0	0	0.3	0	0	0.4	90	45	125	171	115	611
Wind Cave NP	0	0	0.2	0	0	0.3	71	30	29	291	206	468
Yellowstone NP	0	0	0.3	0	0	0.4	110	61	73	192	114	380
SENSITIVE CLASS II AREAS												
Absaorka Beartooth W	0	0	0.7	0	0	1.0	176	99	160	207	133	464
Agate Fossil Beds NM	0	0	0.1	0	0	0.2	43	16	24	259	195	299
Big Horn Canyon NRA	0	0	1.9	0	0	3.0	239	189	1147	356	313	1158
Black Elk W	0	0	0.2	0	0	0.4	60	28	32	270	176	469
Cloud Peak	1	0	6.8	1	1	10.2	110	60	79	212	142	414
Crow IR	3	0	8.3	8	2	12.1	365	350	710	365	358	714
Devils Tower NM	0	0	0.2	0	0	0.4	71	30	43	306	221	368
Fort Belknap IR	0	0	0.1	0	0	0.1	59	25	53	98	59	199
Fort Laramie NHS	0	0	0.1	0	0	0.2	40	13	23	262	200	417
Jedediah Smith W	0	0	0.1	0	0	0.1	48	25	47	164	99	215
Jewel Cave NM	0	0	0.4	0	0	0.5	64	29	37	291	190	507
Lee Metcalf W	0	0	0.1	0	0	0.1	156	108	172	186	130	183
Mt Naomi W	0	0	0.0	0	0	0.1	3	1	17	72	48	255
Mt Rushmore	0	0	0.2	0	0	0.3	59	26	32	260	173	454
Popo Agie W	0	0	0.3	0	0	0.5	40	28	63	183	118	933
Soldier Creek WA	0	0	0.1	0	0	0.2	62	20	30	274	210	323
Wellsville Mountain W	0	0	0.0	0	0	0.1	1	1	10	65	38	187
Wind River IR	0	0	0.4	0	0	0.5	104	59	155	282	220	1073

Table 4-3 Visibility - Method 6 and Monthly f(RH) values - Base Year

Receptor Set	MT CBNG Construction				MT CBNG Operation				ALL MT				ALL SOURCES			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP	0	0	0.1	0.1	0	0	0.1	0.1	53	20	25	14	271	206	217	118
Bob Marshall W	0	0	0.0	0.0	0	0	0.0	0.0	20	10	34	17	28	21	48	30
Bridger W	0	0	0.2	0.0	0	0	0.2	0.1	38	19	40	18	226	151	432	153
Fitzpatrick W	0	0	0.1	0.0	0	0	0.2	0.1	35	17	58	23	156	103	289	127
Fort Peck IR	0	0	0.1	0.0	0	0	0.2	0.1	55	25	26	17	120	79	168	77
Gates of the Mountain	0	0	0.0	0.0	0	0	0.0	0.0	66	39	60	34	85	52	113	52
Grand Teton NP	0	0	0.1	0.0	0	0	0.1	0.0	45	19	31	13	163	90	179	71
North Absaorka W	0	0	0.2	0.0	0	0	0.3	0.1	90	41	66	37	148	85	227	109
North Cheyenne IR	1	0	6.8	2.2	2	0	9.5	3.1	192	97	79	33	299	234	312	121
Red Rock Lakes	0	0	0.0	0.0	0	0	0.1	0.0	49	20	41	16	95	47	86	49
Scapegoat W	0	0	0.0	0.0	0	0	0.0	0.0	36	20	52	37	47	29	78	48
Teton W	0	0	0.1	0.0	0	0	0.2	0.0	53	21	64	23	149	87	245	108
Theodore Roosevelt NP	0	0	0.2	0.1	0	0	0.3	0.1	74	33	57	26	213	153	356	130
UL Bend W	0	0	0.1	0.0	0	0	0.1	0.0	79	27	43	21	125	62	139	48
Washakie W	0	0	0.2	0.0	0	0	0.3	0.1	75	38	85	43	169	109	333	143
Wind Cave NP	0	0	0.2	0.1	0	0	0.2	0.1	69	22	24	16	319	245	264	146
Yellowstone NP	0	0	0.2	0.0	0	0	0.2	0.0	102	45	64	30	187	102	206	91
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W	0	0	0.4	0.1	0	0	0.6	0.1	170	100	135	45	201	131	265	109
Agate Fossil Beds NM	0	0	0.1	0.1	0	0	0.2	0.1	54	14	21	14	295	224	395	129
Big Horn Canyon NRA	0	0	1.2	0.6	0	0	1.9	0.9	245	189	1129	406	358	312	1137	430
Black Elk W	0	0	0.1	0.1	0	0	0.2	0.1	67	23	22	15	305	214	250	142
Cloud Peak	0	0	3.1	0.3	0	0	4.5	0.4	92	44	34	24	201	136	231	162
Crow IR	1	0	5.2	2.6	5	0	7.2	3.4	365	352	659	430	365	360	664	441
Devils Tower NM	0	0	0.2	0.1	0	0	0.3	0.2	82	29	29	17	324	260	268	130
Fort Belknap IR	0	0	0.1	0.0	0	0	0.1	0.0	56	21	44	26	100	52	131	45
Fort Laramie NHS	0	0	0.1	0.0	0	0	0.1	0.1	48	10	21	13	288	243	499	144
Jedediah Smith W	0	0	0.0	0.0	0	0	0.1	0.0	45	22	31	14	166	93	170	59
Jewel Cave NM	0	0	0.2	0.1	0	0	0.4	0.1	65	24	22	14	309	238	269	140
Lee Metcalf W	0	0	0.1	0.0	0	0	0.1	0.0	140	87	89	40	165	107	137	55
Mt Naomi W	0	0	0.0	0.0	0	0	0.1	0.0	4	1	12	3	78	51	194	70
Mt Rushmore	0	0	0.1	0.1	0	0	0.2	0.1	61	23	22	15	297	202	247	139
Popo Agie W	0	0	0.2	0.1	0	0	0.2	0.1	37	17	38	17	204	135	480	165
Soldier Creek WA	0	0	0.1	0.1	0	0	0.2	0.1	59	18	20	15	297	240	391	119
Wellsville Mountain W	0	0	0.0	0.0	0	0	0.1	0.0	1	0	8	2	62	36	156	54
Wind River IR	0	0	0.2	0.1	0	0	0.3	0.2	97	44	88	39	295	229	523	221

Table 4-4 Modeled Deposition for Nitrogen and Sulfur - Base Year

Note: Bold type with shading indicates a modeled impact that is above the Comparative Deposition Value

Receptor Set	POLLUTANT	*MT CBM Construction*	*MT CBM Operation*	*ALL MT*	*ALL SOURCES*	Comparative Deposition Value (kg/ha - yr)
CLASS I AREAS						
Badlands NP	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Bridger W	Nitrogen	0.0	0.0	0.0	0.0	3
	Sulfur	0.0	0.0	0.0	0.0	5
Bob Marshall W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Fitzpatrick W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Fort Peck IR	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.1	5
Gates of the Mountain W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.1	0.1	5
Grand Teton NP	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
North Absaorka W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.1	0.2	5
North Cheyenne IR	Nitrogen	0.0	0.0	0.1	0.3	3
	Sulfur	0.0	0.0	0.2	0.4	5
Red Rock Lakes	Nitrogen	0.0	0.0	0.0	0.0	3
	Sulfur	0.0	0.0	0.0	0.1	5
Scapegoat W	Nitrogen	0.0	0.0	0.0	0.0	3
	Sulfur	0.0	0.0	0.0	0.0	5
Teton W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.1	5
Theodore Roosevelt NP	Nitrogen	0.0	0.0	0.0	0.3	3
	Sulfur	0.0	0.0	0.0	0.3	5
UL Bend W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.1	5
Washakie W	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.1	0.2	5
Wind Cave NP	Nitrogen	0.0	0.0	0.0	0.2	3
	Sulfur	0.0	0.0	0.0	0.3	5
Yellowstone NP	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.1	5
CLASS I / CLASS II SENSITIVE LAKES						
Black Joe Lake, Bridger WA	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Deep Lake, Bridger WA	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Emerald Lake, Cloud Peak WA	Nitrogen	0.0	0.0	0.0	0.2	3
	Sulfur	0.0	0.0	0.1	0.2	5
Florence, Cloud Peak WA,	Nitrogen	0.0	0.0	0.0	0.2	3
	Sulfur	0.0	0.0	0.1	0.2	5
Hobbs Lake, Bridger WA	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Lower Saddlebag, Popo Agie WA	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Ross Lake, Cloud Peak WA	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5
Upper Frozen Lake, Bridger WA	Nitrogen	0.0	0.0	0.0	0.1	3
	Sulfur	0.0	0.0	0.0	0.2	5

5.0 Preferred Alternative Modeling Analysis

5.1 Impacts Summary

This section summarizes the potential impacts for the revised Alternative H scenarios. Results are presented for the potential impacts associated with project CBNG emissions and can be compared to the base year by referring to Tables 4-1, 4-2 and 4-3. Cumulative results for all source groups combined (CBNG project sources plus all other source groups) are also included in Tables 5-1 through 5-5. In addition, Tables 5-4 and 5-5 show results from all Montana sources (includes all emission sources in Montana including project CBNG emissions). The discussion analyzes the impacts for the key receptors, which for this supplemental analysis include the Montana Near-Field, the Northern Cheyenne Indian Reservation, and the Crow Indian Reservation. Maps depicting the modeled results for each of the five scenarios evaluated are presented on Figures D-1 through D-28 in Appendix D. These figure present data on the projected emissions for NO_2, SO_2 and PM_{10} for the project CBNG Operations emission source group and the ALL Sources source group.

The impacts from CBNG development and operation are provided for each key receptor group. The modeling results showed that there are increased impacts over the base year levels, and there are some differences between impacts associated with the various control strategies. Comprehensive results from the model runs for air quality, visibility, and acid deposition are provided for all source groups and receptor groups in Appendix C. The five CBNG development scenarios that were evaluated are summarized as follows:

- Impacts from Alternative H Revised (1.5 g NO_x/bhp-hr, 240:10:1 ratio)
- Impacts from Scenario 1 (1.5 g NO_x/bhp-hr, 200:5:1 ratio)
- Impacts from Scenario 1A (50% of compressor operation and maintenance emissions from Scenario 1)
- Impacts from Scenario 2 (1.0 g NO_x/bhp-hr, 200:5:1 ratio)
- Impacts from Scenario 2A (50% of compressor operation and maintenance emissions from Scenario 2)

For each of the five CBNG development scenarios, the projected impacts on air quality were determined for each receptor group. The analyses for the key receptor groups are provided in Table 5-1 for the Montana near-field receptor grid, in Table 5-2 for the Northern Cheyenne Indian Reservation, and in Table 5-3 for the Crow Indian Reservation. The project CBNG impacts for construction and operation activities have been combined in Tables 5-1, 5-2, and 5-3 to provide a conservative estimate of total project impacts. In actuality, the impacts from different source groups are not arithmetically additive, as maximum impacts may occur at different receptors and/or at different times. Changes from these scenarios at other receptors were generally very minor or not detectable, but are provided in Appendix C.

Table 5-1 Potential Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Montana Near-Field Grid

Pollutant	Avg. Time	Project CBNG Impact Alt H Revised ($\mu g/m^3$)	Project CBNG Impact Scenario 1 ($\mu g/m^3$)	Project CBNG Impact Scenario 1A ($\mu g/m^3$)	Project CBNG Impact Scenario 2 ($\mu g/m^3$)	Project CBNG Impact Scenario 2A ($\mu g/m^3$)	ALL Sources Montana Base Year ($\mu g/m^3$)	PSD[1] Increment Class II ($\mu g/m^3$)	NAAQS /[2] MAAQS ($\mu g/m^3$)
NO2	Annual	2.41	1.93	1.09	1.39	0.81	3.91	25	100
	1-Hour	354	284	158	203	118	428	n/a	565
SO2	Annual	0.03	0.03	0.03	0.03	0.03	1.71	20	60
	24-Hour	0.21	0.21	0.19	0.21	0.19	15.1	91	260
	3-Hour	1.21	1.22	1.08	1.22	1.08	43.9	512	1,300
	1-Hour	4.09	4.12	3.65	4.12	3.65	140	n/a	1,300
PM10	Annual	0.64	0.61	0.40	0.59	0.39	3.52	17	50
	24-Hour	4.33	4.03	2.58	3.75	2.44	30.6	30	150
PM2.5	Annual	0.30	0.26	0.16	0.24	0.14	0.88	n/a	15
	24-Hour	2.18	1.86	1.11	1.60	0.98	6.83	n/a	35

Pollutant	Avg. Time	ALL Sources Impact Alt H Revised ($\mu g/m^3$)	ALL Sources Impact Scenario 1 ($\mu g/m^3$)	ALL Sources Impact Scenario 1A ($\mu g/m^3$)	ALL Sources Impact Scenario 2 ($\mu g/m^3$)	ALL Sources Impact Scenario 2A ($\mu g/m^3$)	ALL Sources Montana Base Year ($\mu g/m^3$)	PSD[1] Increment Class II ($\mu g/m^3$)	NAAQS /[2] MAAQS ($\mu g/m^3$)
NO2	Annual	3.5	3.32	3.00	3.11	2.90	3.91	25	100
	1-Hour	540	540	539	540	539	428	n/a	565
SO2	Annual	1.79	1.79	1.79	1.79	1.79	1.71	20	60
	24-Hour	15.1	15.1	15.1	15.1	15.1	15.1	91	260
	3-Hour	43.9	43.9	43.9	43.9	43.9	43.9	512	1,300
	1-Hour	140	140	140	140	140	140	n/a	1,300
PM10	Annual	2.88	2.88	2.87	2.87	2.86	3.52	17	50
	24-Hour	46.9	46.9	46.8	46.8	46.8	30.6	30	150
PM2.5	Annual	0.89	0.85	0.78	0.83	0.77	0.88	n/a	15
	24-Hour	7.01	6.95	6.77	6.90	6.72	6.83	n/a	35

[1]PSD Increment is to be compared directly to the modeled impact
[2]Background should be added to modeled impact for comparison to AAQS
n/a – not applicable

Table 5-2 Potential Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Northern Cheyenne Indian Reservation

Pollutant	Avg. Time	Project CBNG Impact Alt H Revised ($\mu g/m^3$)	Project CBNG Impact Scenario 1 ($\mu g/m^3$)	Project CBNG Impact Scenario 1A ($\mu g/m^3$)	Project CBNG Impact Scenario 2 ($\mu g/m^3$)	Project CBNG Impact Scenario 2A ($\mu g/m^3$)	ALL Sources Montana Base Year ($\mu g/m^3$)	PSD[1] Increment Class I ($\mu g/m^3$)	NAAQS /[2] MAAQS ($\mu g/m^3$)
NO2	Annual	0.65	0.52	0.29	0.37	0.22	3.91	2.5	100
	1-Hour	125	100	56	71.7	42	428	n/a	565
SO2	Annual	0.01	0.01	0.01	0.01	0.01	1.71	2	60
	24-Hour	0.07	0.08	0.07	0.08	0.07	15.1	5	260
	3-Hour	0.49	0.50	0.44	0.50	0.44	43.9	25	1,300
	1-Hour	1.50	1.52	1.34	1.52	1.34	140	n/a	1,300
PM10	Annual	0.20	0.19	0.12	0.18	0.12	3.52	4	50
	24-Hour	1.55	1.48	0.95	1.42	0.92	30.6	8	150
PM2.5	Annual	0.10	0.09	0.05	0.08	0.05	0.88	n/a	15
	24-Hour	0.76	0.64	0.38	0.57	0.34	6.83	n/a	35

Pollutant	Avg. Time	ALL Sources Impact Alt H Revised ($\mu g/m^3$)	ALL Sources Impact Scenario 1 ($\mu g/m^3$)	ALL Sources Impact Scenario 1A ($\mu g/m^3$)	ALL Sources Impact Scenario 2 ($\mu g/m^3$)	ALL Sources Impact Scenario 2A ($\mu g/m^3$)	ALL Sources Montana Base Year ($\mu g/m^3$)	PSD[1] Increment Class I ($\mu g/m^3$)	NAAQS /[2] MAAQS ($\mu g/m^3$)
NO2	Annual	2.27	2.15	1.84	2.0	1.85	3.91	2.5	100
	1-Hour	428	428	428	428	428	428	n/a	565
SO2	Annual	0.72	0.72	0.72	0.72	0.72	1.71	2	60
	24-Hour	4.70	4.70	4.70	4.70	4.70	15.1	5	260
	3-Hour	10.5	10.5	10.5	10.5	10.5	43.9	25	1,300
	1-Hour	30.7	30.7	30.7	30.7	30.7	140	n/a	1,300
PM10	Annual	1.32	1.31	1.24	1.30	1.23	3.52	4	50
	24-Hour	8.46	8.40	8.25	8.34	8.22	30.6	8	150
PM2.5	Annual	0.72	0.70	0.67	0.69	0.66	0.88	n/a	15
	24-Hour	6.02	5.97	5.85	5.92	5.82	6.83	n/a	35

[1]PSD Increment is to be compared directly to the modeled impact
[2]Background should be added to modeled impact for comparison to AAQS
n/a – not applicable

Table 5-3 Potential Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Crow Indian Reservation

Pollutant	Avg. Time	Project CBNG Impact Alt H Revised ($\mu g/m^3$)	Project CBNG Impact Scenario 1 ($\mu g/m^3$)	Project CBNG Impact Scenario 1A ($\mu g/m^3$)	Project CBNG Impact Scenario 2 ($\mu g/m^3$)	Project CBNG Impact Scenario 2A ($\mu g/m^3$)	ALL Sources Montana Base Year ($\mu g/m^3$)	PSD[1] Increment Class II ($\mu g/m^3$)	NAAQS /[2] MAAQS ($\mu g/m^3$)
NO2	Annual	1.18	0.94	0.53	0.67	0.39	3.91	25	100
	1-Hour	469	376	210	269	157	428	n/a	565
SO2	Annual	0.02	0.02	0.01	0.02	0.01	1.71	20	60
	24-Hour	0.17	0.17	0.15	0.17	0.15	15.1	91	260
	3-Hour	1.28	1.29	1.14	1.29	1.14	43.9	512	1,300
	1-Hour	5.42	5.46	4.84	5.46	4.84	140	n/a	1,300
PM10	Annual	0.33	0.31	0.20	0.29	0.19	3.52	17	50
	24-Hour	3.52	3.39	2.19	3.30	2.14	30.6	30	150
PM2.5	Annual	0.16	0.14	0.08	0.12	0.07	0.88	n/a	15
	24-Hour	1.49	1.29	0.79	1.29	0.75	6.83	n/a	35

Pollutant	Avg. Time	ALL Sources Impact Alt H Revised ($\mu g/m^3$)	ALL Sources Impact Scenario 1 ($\mu g/m^3$)	ALL Sources Impact Scenario 1A ($\mu g/m^3$)	ALL Sources Impact Scenario 2 ($\mu g/m^3$)	ALL Sources Impact Scenario 2A ($\mu g/m^3$)	ALL Sources Montana Base Year ($\mu g/m^3$)	PSD[1] Increment Class II ($\mu g/m^3$)	NAAQS /[2] MAAQS ($\mu g/m^3$)
NO2	Annual	7.15	7.14	7.13	7.13	7.12	3.91	25	100
	1-Hour	**1,589**	**1,589**	**1,589**	**1,589**	**1,589**	428	n/a	565
SO2	Annual	2.62	2.62	2.62	2.62	2.62	1.71	20	60
	24-Hour	16.5	16.5	16.5	16.5	16.5	15.1	91	260
	3-Hour	106	106	106	106	106	43.9	512	1,300
	1-Hour	254	254	254	254	254	140	n/a	1,300
PM10	Annual	15.5	15.4	15.4	15.4	15.4	3.52	17	50
	24-Hour	**205**	**205**	**205**	**205**	**205**	30.6	30	150
PM2.5	Annual	0.83	0.81	0.77	0.80	0.76	0.88	n/a	15
	24-Hour	7.57	7.56	7.55	7.56	7.55	6.83	n/a	35

[1]PSD Increment is to be compared directly to the modeled impact
[2]Background is to be added to modeled impact for comparison to AAQS
n/a – not applicable **bold text indicates potential exceedance**

5.2 Direct Project Impacts (RFD)

This section describes the CALPUFF model predicted direct project impacts for reasonably foreseeable development of CBNG within the project planning area. Only impacts directly attributed to project CBNG construction and operations are discussed in this section. Comprehensive details of modeled emission impacts are provided in Appendix C.

This section also provides discussion of potential project related CBNG impacts as they pertain to Potential for Significant Deterioration (PSD) increment thresholds within the Class I and Class II areas located in the model domain. All National Environmental Policy Act (NEPA) analysis comparisons to the PSD increments are intended to evaluate a threshold of concern and do not represent a regulatory PSD increment consumption analysis.

5.2.1 Alt. H Revised (Compression Ratio 240:10:1 @ 1.5g/bhp-hr)

Under the Alternative H Revised modeling, potential direct project CBNG impacts for both operation and construction activities are below applicable standards for NO_2, SO_2, PM_{10} and $PM_{2.5}$ at the Montana Near-Field receptor grid. Similar results are seen at the Northern Cheyenne Indian Reservation and the Crow Indian Reservation. The predicted project CBNG operation impacts at the Crow Indian Reservation indicate a 1-hour NO_2 ambient concentration of 425 micrograms per cubic meter ($\mu g/m^3$) in comparison with a NAAQS standard of 565 $\mu g/m^3$. Combined project CBNG construction and operation impacts shown in Tables 5-1 through 5-3 as "Project CBNG" indicate that Class I PSD increment levels for at the Northern Cheyenne Indian Reservation and Class II PSD increment levels at the Montana near-field and Crow Indian Reservation receptors would not be exceeded. Combined project CBNG impacts would not exceed the MAAQS as well.

5.2.2 Scenario 1 (Compression Ratio 200:5:1 @ 1.5g/bhp-hr)

Potential direct project CBNG impacts for both operation and construction activities are below applicable standards for NO_2, SO_2, PM_{10} and $PM_{2.5}$ at the Montana Near-Field, Northern Cheyenne Indian Reservation, and Crow Indian Reservation receptor grids under Scenario 1. Impacts for SO_2 would be unchanged from the Alternative H Revised Scenario at the Montana Near-Field and Crow Indian Reservation receptors, and only slightly increased at the Northern Cheyenne Indian Reservation receptors. Combined project CBNG impacts shown in Tables 5-1 through 5-3 as "Project CBNG" are decreased from the Alternative H Revised Scenario, and are still below both Class I and Class II PSD increment levels at all receptors.

5.2.3 Scenario 1A (50 Percent Reduction of Scenario 1 Compressor Operation and Maintenance Emissions)

Scenario 1A potential impacts are less than the impacts described in the Alternative H Revised Scenario, Scenario 1, and Scenario 2 for SO_2, but are the same as the SO_2 impacts predicted by Scenario 2A. Similar results are seen with other modeled pollutants, with the exception that impacts are slightly higher than those predicted by Scenario 2A. Combined project CBNG impacts shown in Tables 5-1 through 5-3

as "Project CBNG" are decreased from the Alternative H Revised Scenario, Scenario 1, and Scenario 2. Combined project CBNG impacts are still below both Class I and Class II PSD increment levels at all receptors.

5.2.4 Scenario 2 (Compression Ratio 200:5:1 @ 1.0g/bhp-hr)

The model predicted potential impacts under Scenario 2 are less than those of Scenario 1, with direct project CBNG construction and operation impacts well below any applicable standard for NO_2, SO_2, PM_{10} and $PM_{2.5}$ at the Montana Near-Field receptor grid and on the Northern Cheyenne Indian Reservation and the Crow Indian Reservation. The predicted impacts at the Crow Indian Reservation indicate a decrease in the 1-hour NO_2 ambient concentration from the project CBNG operation source to 225 $\mu g/m^3$. Combined project CBNG impacts shown in Tables 5-1 through 5-3 as "Project CBNG" are still below both Class I and Class II PSD increment levels at all receptors.

5.2.5 Scenario 2A (50 Percent Reduction of Scenario 2 Compressor Operation and Maintenance Emissions)

As would be anticipated with a 50 percent reduction in Scenario 2 emissions from the CBNG field and sales compressor operation and maintenance emissions, potential direct impacts at the Montana Near-Field receptor grid and on the Northern Cheyenne Indian Reservation and the Crow Indian Reservation are further reduced from Scenario 2. The predicted impacts at the Crow Indian Reservation indicate a further reduction in the 1-hour NO_2 ambient concentration to 113 $\mu g/m^3$. Combined project CBNG impacts shown in Tables 5-1 through 5-3 as "Project CBNG" are still below both Class I and Class II PSD increment levels at all receptors.

5.3 Potential Visibility Impacts

Table 5-4 shows the impacts at the Northern Cheyenne Indian Reservation and the Crow Indian Reservation for the base year, and each of the modeled Alternative H scenarios. Results are provided separately for the Montana project CBNG construction and operation, as well as combined Montana project CBNG construction and operation with RFFA sources as the All Montana and All Sources source groups. Comprehensive details of the modeling results are given in Appendix C and the key impacts under the Method 2 approach are summarized in Table 5-4. Visibility impacts for each of the scenarios for the Northern Cheyenne Indian Reservation and Crow Indian Reservation under Method 6 are summarized in Table 5-5.

5.3.1 Method Two

Potential impacts at Northern Cheyenne Indian Reservation from project CBNG construction are reduced slightly from the Alternative H Revised Scenario through Scenario 2A. For this construction source group there are no days with impacts greater than 10% of the background at either the Northern Cheyenne Indian Reservation or the Crow Indian Reservation. For project CBNG operation there are 35 days per year with impacts above 10% at the Northern Cheyenne Indian Reservation for Scenario 1, but the number of days drops to 2 per year for Scenario 2A. The number of days with impacts above 10% at the Crow Indian Reservation drops from 87 days per year for Scenario 1 to 11 days per year under.

Table 5-4 Potential Visibility Impacts – Method 2 - Summary

Receptor Set	Project CBNG Construction			Project CBNG Operation			ALL MT			ALL SOURCES		
	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}
	5%	10%		5%	10%		5%	10%		5%	10%	
Northern Cheyenne Indian Reservation Class I												
Base Year	3	1	10	7	1	15	209	113	90	298	235	416
Revised Alternative H	2	0	6.0	129	55	51.1	357	279	186.0	363	314	467.7
Scenario 1	2	0	6.0	108	35	40.1	357	276	177.6	363	314	461.6
Scenario 1A	1	0	5.0	35	7	20.1	353	269	170.3	363	310	450.8
Scenario 2	2	0	6.0	67	17	27.7	354	273	173.0	363	312	454.8
Scenario 2A	1	0	5.0	17	2	13.9	353	264	168.0	363	308	447.4
Crow Indian Reservation Class II												
Base Year	3	0	8.3	8	2	12.1	365	350	710	365	358	714
Revised Alternative H	17	0	8.3	195	107	71.0	365	365	>1,000	365	365	>1,000
Scenario 1	17	0	8.3	169	87	55.6	365	365	>1,000	365	365	>1,000
Scenario 1A	7	0	6.7	87	29	28	365	365	>1,000	365	365	>1,000
Scenario 2	17	0	8.3	141	60	38.1	365	365	>1,000	365	365	>1,000
Scenario 2A	7	0	6.7	60	11	19.1	365	365	>1,000	365	365	>1,000

Table 5-5 Potential Visibility Impacts – Method 6 and Monthly f(RH) values - Scenarios

Receptor Set	Project CBNG Construction				Project CBNG Operation				ALL MT				ALL SOURCES			
	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days>N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
Northern Cheyenne Indian Reservation Class I																
Base Year	1	0	5.0	2.2	2	0	9.5	3.1	192	97	79	33	299	234	312	121
Revised Alternative H	1	0	5.0	2.6	97	24	21.9	17.1	356	271	140.7	68.5	364	316	339.2	156.1
Scenario 1	1	0	5.0	2.6	64	19	18.6	13.9	356	268	139.1	65.7	364	314	337.89	154.4
Scenario 1A	1	0	5.0	2.6	20	0	9.3	7.0	355	261	136.1	61.2	364	311	335.4	151.5
Scenario 2	1	0	5.0	2.6	37	7	15.2	9.9	355	264	137.3	62.6	364	312	336.40	152.6
Scenario 2A	1	0	5.0	2.6	7	0	7.6	4.9	354	257	135.2	60.8	364	310	334.68	150.5
Crow Indian Reservation Class II																
Base Year	1	0	5.2	2.6	5	0	7.2	3.4	365	352	659	430	365	360	664	441
Revised Alternative H	7	0	6.7	4.9	173	82	36.7	27.7	365	365	999.5	651.9	365	365	>1,000	666.9
Scenario 1	7	0	6.7	4.9	146	61	29.2	22.0	365	365	999.5	651.3	365	365	>1,000	664.8
Scenario 1A	7	0	6.7	4.9	61	11	14.6	11.0	365	365	999.5	650.3	365	365	>1,000	663.2
Scenario 2	7	0	6.7	4.9	118	38	21.1	16.6	365	365	999.5	650.7	365	365	>1,000	663.6
Scenario 2A	7	0	6.7	4.9	38	3	10.6	8.3	365	365	999.5	649.9	365	365	>1,000	662.8

Scenario 2A. Note that the maximum percentage impact also is reduced with each succeeding scenario. For all sources combined, the model continues to predict impacts on visibility, largely due to the proximity of receptors to the nearby large sources (e.g., Colstrip power plants and coal mine and RFFA CBNG emissions). It is clear that visibility impacts can be substantially reduced with the controls and operations that are applied under Scenario 2A

5.3.2 Method Six

In general, Method 6 predicts slightly lower potential impacts than Method 2. Technically the method involves the evaluation of the eighth highest impact in each calendar year. The impacts for CBNG construction continue to have zero days with impacts above 10% for both receptor groups. The impacts from CBNG operation are less than those of Method 2. For Northern Cheyenne Indian Reservation those impacts are roughly half the Method 2 results for 10% impacts. The number of days impacted at Crow Indian Reservation for this method is also less than the number of days impacted under Method 2. Note that, at the Northern Cheyenne Indian Reservation under Scenarios 1A and 2A there are zero days predicted with impacts above 10% from CBNG construction and operation. At the Crow Indian Reservation there are only 3 days with impacts greater than 10% under Scenario 2A. Impacts for all sources in terms of the number of days with impacts above 10% are nearly identical to the results of Method 2.

5.4 Acid Deposition Impacts

The acid deposition rates for nitrogen and sulfur compounds from project CBNG operation and construction are below established thresholds which are 3 kilograms per hectare per year (kg/ha-year) for nitrogen compounds and 5 kg/ha-year for sulfur compounds (Fox, et. Al. 1989). Complete results are provided in Appendix C, with the base year summary in Table 4-4. A careful examination of those results shows that there are no exceedances of applicable regulatory thresholds for any of the modeled scenarios.

5.5 Cumulative Impacts (Existing Sources+RFD + RFFA Sources)

The cumulative impacts analysis discussion which follows describes the combined effects of project CBNG development sources with reasonably foreseeable future action sources and existing sources which may contribute to potential air quality impacts within the project planning area (Additional detail on potential modeled emissions is provided within the tables in Appendix C). Model results indicate the potential to exceed the 1-hour NO_2 and the 24-hour PM_{10} ambient air quality standards on the Crow Indian Reservation as well as the Class II PSD increment for 24-hour PM_{10}. The Montana Near-Field shows a potential to exceed the Class II PSD increment for 24-hour PM_{10}. There is also a potential to exceed the Class I PSD increment for 24-hour PM_{10} at the Northern Cheyenne Indian Reservation. Cumulative impacts to the key receptors from the All Montana source group and the All Sources source group are very similar between all modeled scenarios. This indicates that there is most likely a dominant emission source in the RFFA CBNG emissions which affects the impacts at a given receptor.

5.5.1 Alt. H Revised (Compression Ratio 240:10:1 @ 1.5g/bhp-hr)

The cumulative impacts under the Alternative H Revised scenario for the Montana Near-Field receptor grid indicate that there are no exceedances of air quality standards predicted (Additional detail on potential modeled emissions is provided within the tables in Appendix C). The 1-hour NO_2 ambient concentration for the All Montana source group is 539 $\mu g/m^3$ and for the All Sources source group is 540 $\mu g/m^3$. Thus, while the standard is not exceeded, the model predicts that there is a potential for impact to this standard. Cumulative impacts at the Northern Cheyenne Indian Reservation are all predicted to be below any applicable air quality standards. On the Crow Indian Reservation cumulative impacts to the 1-hour NO_2 standard and the 24-hour PM_{10} standard are predicted to be exceeded in the All Montana and All Source group categories. The 1-hour NO_2 is 1,589 $\mu g/m^3$ for both of these source groups in comparison with a standard of 565 $\mu g/m^3$, and the 24-hour PM_{10} is 205 $\mu g/m^3$ in comparison with a standard of 150 $\mu g/m^3$. The Base Year impacts for the All Montana and All Sources source groups for 1-hour NO_2 is 428 $\mu g/m^3$ indicating an increase of 1,161 $\mu g/m^3$, and the 24-hour PM_{10} is 134 and 135 $\mu g/m^3$ indicating an increase of 103.4 $\mu g/m^3$ above the Base Year for the All Sources source group and 104.4 $\mu g/m^3$ for the All Montana source group. The increase in 24-hour PM_{10} is above the PSD increment of 30 $\mu g/m^3$ for Class II areas. All other impacts are below any applicable air quality standard.

5.5.2 Scenario 1 (Compression Ratio 200:5:1 @ 1.5g/bhp-hr)

Cumulative impacts under Scenario 1 for the Montana near field receptor grid indicate that there are no exceedances of air quality standards predicted (Additional detail on potential modeled emissions is provided within the tables in Appendix C). The 1-hour NO_2 ambient concentration for the All Montana source group is 539 $\mu g/m^3$ and for the All Sources source group is 540 $\mu g/m^3$. While the standard is not exceeded, the model predicts that there is a potential for impact to this standard. At the Northern Cheyenne Indian Reservation cumulative impacts are all predicted to be below any applicable air quality standards. Cumulative impacts to the 1-hour NO_2 standard and the 24-hour PM_{10} standard on the Crow Indian Reservation are predicted to be exceeded in the All Source group category. The 1-hour NO_2 is 1,589 $\mu g/m^3$ in comparison with a standard of 565 $\mu g/m^3$, and the 24-hour PM_{10} is 205 $\mu g/m^3$ in comparison with a standard of 150 $\mu g/m^3$. All other impacts are below any applicable air quality standard.

5.5.3 Scenario 1A (50 Percent Reduction of Scenario 1 Compressor Operation and Maintenance Emissions)

There is a small difference between Scenario 1A and Scenario 1 cumulative impacts at the Montana near field receptor grid. The 1-hour NO_2 ambient concentration for the All Montana source group and All Sources source group is 539 $\mu g/m^3$. Cumulative impacts to the Northern Cheyenne Indian Reservation are all predicted to be below

any applicable air quality standards. The same results for cumulative impacts to the 1-hour NO_2 standard and the 24-hour PM_{10} standard on the Crow Indian Reservation are predicted under Scenario 1A as in Scenario 1. All other impacts are below any applicable air quality standard.

5.5.4 Scenario 2 (Compression Ratio 200:5:1 @ 1.0g/bhp-hr)

There is no difference between Scenario 2 and Scenario 1 cumulative impacts at the Montana near field receptor grid. This indicates that there is most likely a dominant emission source in the RFFA source emissions or other existing emission sources (such as the Colstrip power plants and coal mine) which affects the impacts at a specific receptor. Cumulative impacts to the Northern Cheyenne Indian Reservation are all predicted to be below any applicable air quality standards. The same results for cumulative impacts to the 1-hour NO_2 standard and the 24-hour PM_{10} standard on the Crow Indian Reservation are predicted under Scenario 2 as in Scenario 1. All other impacts are below any applicable air quality standard.

5.5.5 Scenario 2A (50 Percent Reduction of Scenario 2 Compressor Operation and Maintenance Emissions)

There is a small difference between Scenario 2A and Scenario 2 cumulative impacts at the Montana near field receptor grid. The 1-hour NO2 ambient concentration for the All Montana source group and All Sources source group is 539 $\mu g/m^3$. Cumulative impacts to the Northern Cheyenne Indian Reservation are all predicted to be below any applicable air quality standards. The same results for cumulative impacts to the 1-hour NO_2 standard and the 24-hour PM_{10} standard on the Crow Indian Reservation are predicted under Scenario 2A as in Scenario 1. All other impacts are below any applicable air quality standard.

5.6 Tongue River Railroad

The results from the revised modeling effort shown in Table 5-6 indicate that the reductions in emissions and the reconfiguration of the Tongue River Railroad sources led to reductions in visibility impacts at nearby sensitive Class I and Class II areas, and no notable reductions in impacts at the more distant sensitive area receptors.

In the original configuration, the Tongue River Railroad emissions led to measurable impacts on the Northern Cheyenne Indian Reservation and on the Crow Indian Reservation. Originally, the number of days with impacts above 1.0 deciview was 23 days for the Northern Cheyenne Indian Reservation, 8 days for the Crow Indian Reservation, and 2 days at the Cloud Peak Wilderness area. As a result of modifying the source configuration, those numbers dropped to one day at the Northern Cheyenne and zero days at the Crow Indian Reservation and Cloud Peak Wilderness area. The reconfiguration of the emission source points demonstrates that the Tongue River Railroad by itself does not have the potential to cause any impacts on visibility at any mandatory Class I or Class II areas.

Table 5-6
Visibility Impacts of Original Versus Revised Tongue River Railroad Source

Receptor Set	Original Analysis Tongue River Railroad				Revised Source Configuration Tongue River Railroad			
	Number of Days > N% Change in Bext		Maximum % Change in Bext	8th Highest % Change in Bext	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%		
CLASS I AREAS								
Badlands NP Class I	0	0	1	1	0	0	0	0
Bob Marshall W Class I	0	0	0	0	0	0	0	0
Bridger W Class I	0	0	2	1	0	0	0	0
Fitzpatrick W Class I	0	0	2	0	0	0	0	0
Fort Peck IR Class I	0	0	2	1	0	0	0	0
Gates of the Mountain W Class I	0	0	1	0	0	0	0	0
Grand Teton NP Class I	0	0	1	0	0	0	0	0
North Absaroka W Class I	0	0	3	1	0	0	1	0
North Cheyenne IR Class I	71	23	27	14	1	0	7	3
Red Rock Lakes Class I	0	0	1	0	0	0	0	0
Scapegoat W Class I	0	0	1	0	0	0	0	0
Teton W Class I	0	0	1	0	0	0	0	0
Theodore Roosevelt NP Class I	0	0	3	1	0	0	1	0
UL Bend W Class I	0	0	2	1	0	0	0	0
Washakie W Class I	0	0	2	1	0	0	0	0
Wind Cave NP Class I	0	0	2	1	0	0	0	0
Yellowstone NP Class I	0	0	3	0	0	0	1	0
SENSITIVE CLASS II AREAS								
Absaroka Beartooth W Class II	1	0	6	1	0	0	1	0
Agate Fossil Beds NM Class II	0	0	1	1	0	0	0	0
Big Horn Canyon NRA Class II	3	0	7	3	0	0	1	1
Black Elk W Class II	0	0	2	1	0	0	0	0
Cloud Peak Class II	4	2	24	3	0	0	5	1
Crow IR Class II	27	8	21	11	0	0	5	2
Devils Tower NM Class II	0	0	2	1	0	0	0	0
Fort Belknap IR Class II	0	0	2	1	0	0	0	0
Fort Laramie NHS Class II	0	0	1	1	0	0	0	0
Jedediah Smith W Class II	0	0	1	0	0	0	0	0
Jewel Cave NM Class II	0	0	2	1	0	0	0	0
Lee Metcalf W Class II	0	0	2	0	0	0	0	0
Mt Naomi W Class II	0	0	1	0	0	0	0	0
Mt Rushmore Class II	0	0	2	1	0	0	0	0
Popo Agie W Class II	0	0	2	1	0	0	0	0
Soldier Creek WA Class II	0	0	1	1	0	0	0	0
Wellsville Mountain W Class II	0	0	0	0	0	0	0	0
Wind River IR Class II	0	0	3	1	0	0	1	0

6.0 Other Revisions to Draft SEIS

6.1 Monitoring

Monitoring would be conducted according to the following parameters (see Table 6-1) which are also contained in the Draft SEIS Monitoring Appendix.

Table 6-1 Monitoring

Element	Item	Location	Technique	Unit of Measure	Frequency and Duration	Remedial Action Trigger	Management Options
AIR QUALITY	Gaseous and particulate critical air pollutants	area-wide	air quality modeling and ambient air samples	µg/m^3 and parts per million concentrations as (µg/m^3)	hourly to 24 hr samples as per standards	predicted or measured exceedances of NAAQS and/or PSD increments by MDEQ	implement additional emission controls or operating limits
	Gaseous and particulate critical air pollutants	Birney/Ashl and area	ambient air samples	µg/m^3 and parts per million concentrations as (µg/m^3)	hourly to 24 hr samples as per standards	before expanded development activity	implement additional emission controls or operating limits
	Gaseous and particulate critical air pollutants	area-wide	emission inventory	lbs/hr and tons/yr	annually	continuous	require submittal of annual reports
	Cumulative compressor horsepower	area-wide	tracking	horsepower	continuous	when horsepower requirements for CBNG wells in the Montana portion of the PRB exceed 133,956	subsequent visibility modeling; if it indicates unacceptable impacts would occur at a future point in the PRB development, the modeling work would include mitigation scenarios

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MILES CITY FIELD OFFICE

Supplemental Air Quality Analysis

APPENDIX A
EMISSIONS INPUT

APPENDIX A

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A.1 Montana Project Emission Calculations

A.1.1 Construction Emission Calculations for the Montana CBM Project Activities – Alternative H Revised

Fugitive Dust Emissions

Emission Factors for Construction Activities

				Reference
E	=	1.2 Tons of TSP/acre/month		EPA, AP-42, Volume I, Section 13.2.3 Heavy Construction Operations (1/95)
PM10	=	26 % of TSP		Argonne National Laboratory - 2002 TSD
PM2.5	=	15 % of PM10		Argonne National Laboratory - 2002 TSD
CE	=	50 %	Control Efficiency for watering	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emission Calculations for Construction Activities

Area Disturbed for CBNG Wells	Emission Estimation Basis	Disturbed Area (acre)	Avg. # of Days to Complete	Total # of Well Pads or Stations	Total Disturbed Area	Emissions (lb/well pad, lb/stn, or lb/project)			Emissions (ton/project)		
						TSP	PM10	PM2.5	TSP	PM10	PM2.5
Road	per Well Pad	0.75	3	6,075	4,556	90	23	4	273	71	11
Well Pad	per Well Pad	0.25	3	6,075	1,519	30	8	1	91	24	4
Gathering Poly Pipeline (Low Pressure)	per Well Pad	1.5	1	6,075	9,113	60	16	2	182	47	7
Steel Pipeline (Low/IntermediatePressure)	per Field Station	6.06	1	673	4,078	242	63	9	82	21	3
Sales Pipeline, 36" D x 600 miles	per Project		1		1,316	52,640	13,686	2,053	26	7	1
Electric Line	per Well Pad	0.35	1	6,075	2,126	14	4	1	43	11	2
Field Compressor Station	per Field Station	2	5	673	1,346	400	104	16	135	35	5
Sales Compressor Station	per Sales Station	1	5	67	67	200	52	8	7	2	0
Impoundment	per Impoundment	6	5	356	2,136	1,200	312	47	214	56	8
				Total	**26,257**				**1,052**	**274**	**41**

Exhaust Emissions

Emission Factors for Construction Equipment EPA, AP-42, Volume II, Section 11-7 Heavy-Duty Construction Equipment (9/85)

Equipment	Emission Factors (g/hp-hr) NOx	PM10	SO2	CO	VOCs	Equipment Category in AP-42
Backhoe	8.81	0.81	0.86	2.71	0.97	Wheeled Loader
Dozer	7.81	0.69	0.85	2.15	0.75	Track-type Tractor
Blade	7.14	0.63	0.87	1.54	0.36	Motor Grader
Trencher	11.01	0.90	0.93	4.60	1.01	Miscellaneous
Trackhoe	9.30	0.68	0.85	2.26	1.11	Track-type Tractor

Emissions Estimation for Construction Equipment

Construction Site	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well Pad or per Station	# of Operating Hours per Well Pad or per Station	# of Well Pads or Stations	Emissions (lb/well pad, lb/stn, or lb/project) NOx	PM10	SO2	CO	VOCs	Emissions (ton/equipment type) NOx	PM10	SO2	CO	VOCs	Emissions (ton/construction site) NOx	PM10	SO2	CO	VOCs
Road	Blade	100	1	80	10	0.2	2	6,075	3	0.2	0.3	0.5	0.1	8	1	1	2	0					
	Backhoe	80	1	75	10	0.1	1	6,075	1.2	0.1	0.1	0.4	0.1	4	0	0	1	0	11	1	1	3	1
Well Pad	Backhoe	80	1	75	10	0.5	5	6,075	6	0.5	0.6	2	0.6	18	2	2	5	2	18	2	2	5	2
Gathering Poly Pipeline (Low Pressure)	Blade	100	1	80	10	0.25	2.5	6,075	3	0.3	0.4	0.7	0.2	10	1	1	2	0					
	Trencher	175	1	80	10	1	10	6,075	34	3	3	14	3	103	8	9	43	9					
	Backhoe	80	1	75	10	0.25	2.5	6,075	3	0.3	0.3	0.9	0.3	9	1	1	3	1	122	10	11	48	11
Steel Pipeline (Low/Intermediate Pressure)	Blade	100	1	80	10	5	50	673	63	5.6	7.7	13.6	3.2	21	2	3	5	1					
	Trencher	175	1	80	10	5	50	673	170	13.9	14.4	71.0	15.6	57	5	5	24	5					
	Trackhoe	75	1	75	10	10	100	673	115	8.2	10.5	28.0	13.8	39	3	4	9	5	117	9	11	38	11
Steel Pipeline (Sales)	Blade	100	1	80	10	43.4	434.3	1	547	48	67	118	28	0.27	0.02	0.03	0.06	0.01					
	Trencher	175	1	80	10	43.4	434.3	1	1,476	121	125	617	135	0.74	0.06	0.06	0.31	0.07					
	Trackhoe	75	1	75	10	65.1	651.4	1	751	53	69	183	90	0.38	0.03	0.03	0.09	0.04	1.39	0.11	0.13	0.46	0.13
Field Compressor Station	Dozer	350	1	80	8	2	16	673	77	7	8	21	7	26.0	2.3	2.8	7.1	2.5					
	Backhoe	80	2	80	8	3	24	673	60	5	6	18	7	20.1	1.8	2.0	6.2	2.2	46.0	4.1	4.8	13.3	4.7
Sales Compressor Station	Dozer	350	1	80	8	2	16	67	77	7	8	21	7	2.6	0.2	0.3	0.7	0.2					
	Backhoe	80	2	80	8	3	24	67	60	5	6	18	7	2.0	0.2	0.2	0.6	0.2	4.6	0.4	0.5	1.3	0.5
Impoundment	Dozer	350	1	80	8	0.4	3.2	356	15	1	2	4	1	2.7	0.2	0.3	0.8	0.3					
	Blade	100	1	80	8	0.4	3.2	356	4	0	0	1	0	0.7	0.1	0.1	0.2	0.0	3.5	0.3	0.4	0.9	0.3
													Subtotal:	323	27	30	110	30	323	27	30	110	30

Emission Factors for Industrial Engines

Emission Source	Fuel Type	Emission Factors Unit	NOx	PM10	SOx	CO	VOCs
Industrial Engine	Diesel	lb/hp-hr	3.10E-02	2.20E-03	2.05E-03	6.68E-03	2.51E-03
Flaring	Natural Gas	lb/MMCF	69	7.6	0.6	377	64

EPA, AP-42, Volume I, Section 3.3 Gasoline and Industrial Engines
EPA, AP-42, Volume I, Section 13.5 Industrial Flares & Section 1.4 Natural Gas Combustion

Emissions Estimation for Industrial Engines

Construction Site Activity	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well	# of Operating Hours per Well	# of Wells	Emissions (lb/well) NOx	PM10	SO2	CO	VOCs	Emissions (ton/equipment type) NOx	PM10	SO2	CO	VOCs	Emissions (ton/project activity) NOx	PM10	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Main Deck	400	1	60	11	3	33	18,225	246	17	16	53	20	2,237	159	148	482	181	3,254	231	215	701	263
	Auxillary Pump	200	1	90	10	2	20	18,225	112	8	7	24	9	1,017	72	67	219	82					
Well Completion & Testing	Main Deck	400	1	60	10	1	10	18,225	74	5	5	16	6	678	48	45	146	55	13,716	975	905	3,154	1,143
	Auxillary Pump	125	1	90	6	1	6	18,225	21	1	1	5	2	191	14	13	41	15					
	Equipment Type	**Capacity (kw)**	**Avg # of Wells Served**	**Avg. Load Factor (%)**	**# of Operating Hours per Day**	**Avg. # of Operating Days**	**# of Operating Hours per Well**	**# of Wells**															
	Field Generators for Pumps & Lighting	125	8	75	24	120	360	18,225	1403	100	93	302	114	12,810	909	847	2,780	1,037					
	Emission Source	**Average Volume Flared (MCFD/well)**			**Average # Days of Continuous Flaring**			**# of Wells**															
	Flaring of Natural Gas	60			1			18,225	4	0.5	0.0	23	4	38	4	0	207	35					
													Subtotal:	16,971	1,206	1,120	3,855	1,406	16,971	1,206	1,120	3,855	1,406
													Total:	17,294	1,233	1,151	3,965	1,436	17,294	1,233	1,151	3,965	1,436

PM2.5 is assumed to be same as PM10

Commuting Vehicles

Road Dust Emissions

Emission Factors for Road Traffic

$$E\ (lb/VMT) = \frac{k\ (s/12)^a\ (W/3)^b}{(M/0.2)^c}$$

Parameter	PM10	PM2.5
k	2.6	0.38
a	0.8	0.8
b	0.4	0.4
c	0.3	0.3

Source: EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)

Function/Variable Description	Assumed Value	Reference
E = size-specific emission factor (lb/VMT)		
s = surface material silt content (%)	5.1	EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
W = mean vehicle weight (tons)	listed in table below	
M = surface material moisture content (%)	0.2	Default value in EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
CE = control efficiency for watering (%)	50	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emissions Estimation for Road Traffic

Construction Site Destination	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Road	Semi Trucks	60,000	6	2.6	16	6,075	1.65	26	78	78	0.24	4	11	11
Well Pad	Haul Trucks	45,000	6	2	12	6,075	1.47	18	54		0.21	3	8	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	79	0.10	1	4	12
Poly Pipeline, < 3"	Haul Trucks	45,000	6	4	24	6,075	1.47	35	107		0.21	5	16	
	Pickup Trucks	7,000	6	4	24	6,075	0.70	17	51	158	0.10	2	7	23
Steel Pipeline	Semi Trucks	60,000	6	4	24	673	1.65	40	13		0.24	6	2	
	Haul Trucks	45,000	6	40	240	673	1.47	352	119		0.21	51	17	
	Pickup Trucks	7,000	6	160	960	673	0.70	669	225	357	0.10	98	33	52
Sales Pipeline, 36" D, 600 mi	Semi Trucks	60,000	35	94	3,290	1	1.65	5418	3		0.24	792	0	
	Haul Trucks	45,000	35	94	3,290	1	1.47	4829	2		0.21	706	0	
	Pickup Trucks	7,000	50	94	4,700	1	0.70	3277	2	7	0.10	479	0	1
Electric Line	Haul Trucks	45,000	6	1	6	6,075	1.47	9	27		0.21	1	4	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	52	0.10	1	4	8
Field Compressor Station	Semi Trucks	60,000	10	15	150	673	1.65	247	83		0.24	36	12	
	Haul Trucks	45,000	10	48	480	673	1.47	705	237		0.21	103	35	
	Pickup Trucks	7,000	10	192	1,920	673	0.70	1339	451	771	0.10	196	66	113
Sales Compressor Station	Semi Trucks	60,000	10	18.5	185	67	1.65	305	10		0.24	45	1	
	Haul Trucks	45,000	10	48	480	67	1.47	705	24		0.21	103	3	
	Pickup Trucks	7,000	10	192	1,920	67	0.70	1339	45	79	0.10	196	7	11
Impoundment	Semi Trucks	60,000	6	0.02	0.12	356	1.65	0	0		0.24	0	0	
	Haul Trucks	45,000	6	0.02	0.12	356	1.47	0	0		0.21	0	0	
	Pickup Trucks	7,000	6	0.02	0.12	356	0.70	0	0	0	0.10	0	0	0
								Subtotal:	**1,580**	**1,580**			**231**	**231**

Emissions Estimation for Road Traffic Continued

Construction Site Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions			Controlled Em. Factor (lb/VMT)	Emissions		
								(lb/well)	(ton/veh. type)	(ton/proj. activity)		(lb/well)	(ton/veh. type)	(ton/const. site)
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	80,000	6	1	6	18,225	1.85	11	101	1,587	0.27	2	15	232
	Fuel Haul Truck	45,000	6	2	12	18,225	1.47	18	161		0.21	3	23	
	Mud Haul Truck, Water Hauling	60,000	6	7	42	18,225	1.65	69	630		0.24	10	92	
	Rig Crew	7,000	6	3	18	18,225	0.70	13	114		0.10	2	17	
	Co. Supervisor	7,000	6	8	48	18,225	0.70	33	305		0.10	5	45	
	Tool Pusher	7,000	6	6	36	18,225	0.70	25	229		0.10	4	33	
	Logger, Engr. Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
Well Completion & Testing	Semi Casing	45,000	6	1	6	18,225	1.47	9	80	1,663	0.21	1	12	243
	Semi Completion, Unit Rig	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Tubing Truck	45,000	6	1	6	18,225	1.47	9	80		0.21	1	12	
	Haul Cementer, Pump Truck	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Haul Cementer, Cement Truck	60,000	6	1	6	18,225	1.65	10	90		0.24	1	13	
	Haul Completion, Equip. Truck	20,000	6	1	6	18,225	1.06	6	58		0.16	1	8	
	Haul Preforators, Logging Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Welders	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Water Truck	60,000	6	9	54	18,225	1.65	89	810		0.24	13	118	
	Pickup Cementor, Engineer	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Co. Supervisor	7,000	6	2	12	18,225	0.70	8	76		0.10	1	11	
	Pickup Miscellaneous Supplies	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Roustabout Crew	12,000	6	2	12	18,225	0.87	10	95		0.13	2	14	
								Subtotal:	3,250	3,250			475	475
								Total:	4,830	4,830			706	706

Exhaust Emissions

Emission Factors for Road Traffic

$$E\ (lb/VMT) = \frac{k\ (s/12)^a\ (W/3)^b}{(M/0.2)^c}$$

Parameter	PM10	PM2.5
k	2.6	0.38
a	0.8	0.8
b	0.4	0.4
c	0.3	0.3

Source: EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)

Function/Variable Description	Assumed Value	Reference
E = size-specific emission factor (lb/VMT)		
s = surface material silt content (%)	5.1	EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
W = mean vehicle weight (tons)	listed in table below	
M = surface material moisture content (%)	0.2	Default value in EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
CE = control efficiency for watering (%)	50	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emissions Estimation for Road Traffic

Construction Site Destination	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Road	Semi Trucks	60,000	6	2.6	16	6,075	1.65	26	78	78	0.24	4	11	11
Well Pad	Haul Trucks	45,000	6	2	12	6,075	1.47	18	54		0.21	3	8	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	79	0.10	1	4	12
Poly Pipeline, < 3"	Haul Trucks	45,000	6	4	24	6,075	1.47	35	107		0.21	5	16	
	Pickup Trucks	7,000	6	4	24	6,075	0.70	17	51	158	0.10	2	7	23
Steel Pipeline	Semi Trucks	60,000	6	4	24	673	1.65	40	13		0.24	6	2	
	Haul Trucks	45,000	6	40	240	673	1.47	352	119		0.21	51	17	
	Pickup Trucks	7,000	6	160	960	673	0.70	669	225	357	0.10	98	33	52
Sales Pipeline, 36" D, 600 mi	Semi Trucks	60,000	35	94	3,290	1	1.65	5418	3		0.24	792	0	
	Haul Trucks	45,000	35	94	3,290	1	1.47	4829	2		0.21	706	0	
	Pickup Trucks	7,000	50	94	4,700	1	0.70	3277	2	7	0.10	479	0	1
Electric Line	Haul Trucks	45,000	6	1	6	6,075	1.47	9	27		0.21	1	4	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	52	0.10	1	4	8
Field Compressor Station	Semi Trucks	60,000	10	15	150	673	1.65	247	83		0.24	36	12	
	Haul Trucks	45,000	10	48	480	673	1.47	705	237		0.21	103	35	
	Pickup Trucks	7,000	10	192	1,920	673	0.70	1339	451	771	0.10	196	66	113
Sales Compressor Station	Semi Trucks	60,000	10	18.5	185	67	1.65	305	10		0.24	45	1	
	Haul Trucks	45,000	10	48	480	67	1.47	705	24		0.21	103	3	
	Pickup Trucks	7,000	10	192	1,920	67	0.70	1339	45	79	0.10	196	7	11
Impoundment	Semi Trucks	60,000	6	0.02	0.12	356	1.65	0	0		0.24	0	0	
	Haul Trucks	45,000	6	0.02	0.12	356	1.47	0	0		0.21	0	0	
	Pickup Trucks	7,000	6	0.02	0.12	356	0.70	0	0	0	0.10	0	0	0
								Subtotal:	**1,580**	**1,580**			**231**	**231**

Emissions Estimation for Road Traffic Continued

Construction Site Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions			Controlled Em. Factor (lb/VMT)	Emissions		
								(lb/well)	(ton/veh. type)	(ton/proj. activity)		(lb/well)	(ton/veh. type)	(ton/const. site)
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	80,000	6	1	6	18,225	1.85	11	101	1,587	0.27	2	15	232
	Fuel Haul Truck	45,000	6	2	12	18,225	1.47	18	161		0.21	3	23	
	Mud Haul Truck, Water Hauling	60,000	6	7	42	18,225	1.65	69	630		0.24	10	92	
	Rig Crew	7,000	6	3	18	18,225	0.70	13	114		0.10	2	17	
	Co. Supervisor	7,000	6	8	48	18,225	0.70	33	305		0.10	5	45	
	Tool Pusher	7,000	6	6	36	18,225	0.70	25	229		0.10	4	33	
	Logger, Engr. Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
Well Completion & Testing	Semi Casing	45,000	6	1	6	18,225	1.47	9	80	1,663	0.21	1	12	243
	Semi Completion, Unit Rig	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Tubing Truck	45,000	6	1	6	18,225	1.47	9	80		0.21	1	12	
	Haul Cementer, Pump Truck	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Haul Cementer, Cement Truck	60,000	6	1	6	18,225	1.65	10	90		0.24	1	13	
	Haul Completion, Equip. Truck	20,000	6	1	6	18,225	1.06	6	58		0.16	1	8	
	Haul Preforators, Logging Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Welders	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Water Truck	60,000	6	9	54	18,225	1.65	89	810		0.24	13	118	
	Pickup Cementor, Engineer	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Co. Supervisor	7,000	6	2	12	18,225	0.70	8	76		0.10	1	11	
	Pickup Miscellaneous Supplies	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Roustabout Crew	12,000	6	2	12	18,225	0.87	10	95		0.13	2	14	
								Subtotal:	3,250	3,250			475	475
								Total:	4,830	4,830			706	706

A.1.1.2 Emission Calculations for the Montana CBM Project Operational Activities – Alternative H Revised

Compressors – Natural Gas Fired

Emission Factors for Compressors:

Compressor			Make	Model	Capacity (hp)	Emission Factors (g/hp-hr)					
						NOx	PM10	SO2	CO	VOCs	HCHO
Field	Rich Burn	50%	Caterpillar	G3408	400	1.50	6.60E-02	2.00E-03	2.00	1.00	0.05
	Lean Burn	50%	Waukesha	F18GL	400	1.50	6.60E-02	2.00E-03	1.50	0.50	0.20
Sales	Rich Burn	50%	Waukesha	7044GSI	1680	1.50	6.60E-02	2.00E-03	2.00	1.00	0.05
	Lean Burn	25%	Caterpillar	G3516LE	1340	1.50	3.40E-02	2.00E-03	0.50	1.00	0.07
		25%	Caterpillar	G3608	2225	1.50	3.40E-02	2.00E-03	0.30	1.00	0.07

Emissions Estimation for Compressors:

Type of Compressors	Total # of Operating Station-Year	Operating Hours per Year	Total Emissions (ton/project)				
			NOx	PM10	SO2	CO	VOCs
Field	7,299	8,760	42,289	1,861	56	49,337	21,144
Sales	730	8,760	18,306	604	24	14,200	12,204
		Total	**60,594**	**2,465**	**81**	**63,536**	**33,348**

Assume PM2.5 is same as PM10

Dehydrators

Emission Factors for Dehydrators

Unit	NOx	PM10	SO2	CO	VOCs
lb/MMscf	100	7.6	0.6	84	5.5
lb/MMBtu	9.80E-02	7.45E-03	5.88E-04	8.24E-02	5.39E-03

Emissions Estimations for Dehydrators

Compressor Station	Total Gas Production Rate (MMCFD-yr)	Firing Rate (Btu/hr/MMCFD)	Operating Hours per Year	Total Emissions (ton/project)				
				NOx	PM10	SO2	CO	VOCs
Sales	44,944	25,000	8,760	482	37	3	406	27

Road Dust Emissions

Emissions Estimates for Road Traffic:

Activity	Compressor Station	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Stations Visited per Day	# of Visits per Station per Year	Miles Traveled per Station per Year	Total # of Operating Station-Yr	PM10			PM2.5		
									Em. Factor (lb/VMT)	Emissions (lb/ station-yr)	Emissions (ton/ project)	Em. Factor (lb/VMT)	Emissions (lb/ station-yr)	Emissions (ton/project)
Inspection Visits for Compressor Stations	Field	Pickup Truck	7,000	20	15	12	16	7,299	1.03	16.5	60	0.15	2.4	9
	Sales	Pickup Truck	7,000	20	15	52	69	730	1.03	71.4	26	0.15	10.4	4
										Total:	**86**			**13**

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Compressor Station	Vehicle		Round Trip Distance (mi/day)	# of Stations Visited per Day	# of Visits per Station per Year	Miles Traveled per Station per Year	Total # of Operating Station-Yr	Emissions											
		Type	Class						(lb/station-yr)						(ton/project)					
									NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Inspection Visits for Compressor Stations	Field	Pickup Truck	LDGT2	20	15	12	16	7,299	0.04	0.00	0.00	0.00	0.41	0.03	0.1	0.0	0.0	0.0	1.5	0.1
	Sales	Pickup Truck	LDGT2	20	15	52	69	730	0.15	0.02	0.01	0.02	1.78	0.11	0.1	0.0	0.0	0.0	0.6	0.0
														Totals:	**0.2**	**0.0**	**0.0**	**0.0**	**2.1**	**0.1**

Well Workover

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	PM10 Emissions			PM2.5 Emissions		
							Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
								(lb/well)	(ton/project)		(lb/well)	(ton/project)
Well Workover	Bobtail Truck	40,000	50	1	50	18,225	2.06	103	939	0.30	15	138

Exhaust Emissions – On-site

Emissions Estimation for Industrial Engines:

Activity	Equipment	Capacity (hp)	Operating Hours per Day	Total # of Wells Drilled	Emissions									
					(lb/well)					(ton/project)				
					NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Well Workover	Truck-Mounted Unit	400	10	18,225	124	9	8	27	10	1,130	80	75	243	91

Exhaust Emissions – On-site

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	Emissions											
	Type	Class					(lb/station-yr)						(ton/project)					
							NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Well Workover	Bobtail Truck	HDDV	50	1	50	18,225	0.9	0.2	0.2	0.2	1.9	0.5	8	2	2	2	17	5

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	PM10 Emissions			PM2.5 Emissions		
								Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
									(lb/well)	(ton/project)		(lb/well)	(ton/project)
Visits for Inspection and Repair	200-hp Pickup	7,000	75	120	12	7.5	175,181	1.03	7.7	677	0.15	1.1	99

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	Emissions											
								(lb/station-yr)						(ton/project)					
	Type	Class						NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Visits for Inspection and Repair	200-hp Pickup	LDGT2	75	120	12	7.5	175,181	0.017	0.002	0.001	0.002	0.192	0.012	1.5	0.1	0.1	0.2	16.9	1.1

A.1.1.3 Emission Calculations for the Montana CBM Project Maintenance Activities – Alternative H Revised

Road Maintenance – Heavy Equipment

Given Data:

Maintenance	Equipment/Vehicle			Road Length Worked On per Day (mi)	# of Operating Hours per Day
	Type	Fuel	Capacity (hp)		
Summer	Heavy Equipment	Diesel	135	6	10
	Commuting Vehicle	Gasoline	225	6	1
Winter	Heavy Equipment	Diesel	135	5	10
	Commuting Vehicle	Gasoline	225	6	1.5

Estimation of Total and Cumulative Length of Roads:

Total Length of Roads to be Built (mi)	6,224
Cummulative Length of Roads Maintained (mi-yr)	59,826

Estimation of Total Operation Days and Hours:

Season	# of Operation per Year	Cummulative Length of Roads (mi-yr)	Road Length Worked On (mi/day)	# of Operating Hours per Day	Total # of Operating Days	Total # of Operating Hours
Summer	2	59,826	6	10	19,942	199,420
Winter	1	59,826	5	10	11,965	119,652
				Totals:	31,907	319,071

Fugitive Dust Emissions

Emissions Factor for Grader - Road Dust

Pollutant	Emission Factor Equation (lb/VMT)	S (mph)	Emission Factor (lb/VMT)
PM10	E = (0.6)(0.051)(S^2)	5	0.765
PM2.5	E = (0.031)(0.051)(S^2.5)	5	0.069

Emissions Estimation for Grader - Road Dust:

Activity	Equipment	Total # of Operating Hours	Mean Vehicle Speed (mph)	Total Miles Maintained	PM10		PM2.5	
					Em. Factor (lb/VMT)	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/project)
Road Maintenance	Grader	191,443	5	957,214	0.765	366	0.069	33

Exhaust Emissions

Emissions Factor for Grader - Exhaust:

Equipment	Emission Factors (g/hp-hr)				
	NOx	PM10	SO2	CO	VOCs
Grader	7.14	0.63	0.87	1.54	0.36

Emissions Estimation for Grader - Road Dust:

Activity	Vehicle Type	Capacity (hp)	Total # of Operating Hours	Emissions									
				(lb/well)					(ton/project)				
				NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Road Maintenance	Grader	135	191,443	2.13	0.19	0.26	0.46	0.11	203	18	25	44	10

Road Maintenance – Commuting Vehicles

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	PM10		PM2.5	
						Em. Factor (lb/VMT)	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/project)
Road Maintenance	Pickup Truck	7,000	6	31,907	191,443	1.03	99	0.15	.14

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	Emissions (ton/project)					
	Type	Class				NOx	PM10	PM2.5	SO2	CO	VOCs
Road Maintenance	Pickup Truck	LDGT2	6	31,907	191,443	0.21	0.02	0.02	0.02	2.46	0.16

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight	Compressor Station	# of Stations	Cummulative # of Station-Yr	# of Visits per Year	Total # of Round Trips	Round Trip Distance	Total Miles Traveled	PM10		PM2.5	
										Em. Factor	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/project)
Maintenance Visits to Compressor Stations	Pickup Truck	7,000	Field	673	7,299	2	14,598	20	291,976	1.03	150	0.15	22
	Pickup Truck	7,000	Sales	67	730	2	1,460	20	29,202	1.03	15	0.15	2
										Totals:	165		24

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Compressor Station	# of Stations	Cummulative # of Station-Yr	# of Visits per Year	Total # of Round Trips	Round Trip Distance	Total Miles Traveled	Emissions (ton/project)					
	Type	Class								NOx	PM10	PM2.5	SO2	CO	VOCs
Inspection Visits for	Pickup Truck	LDGT2	Field	673	7,299	2	14,598	20	291,976	0.33	0.03	0.03	0.04	3.75	0.24
	Pickup Truck	LDGT2	Sales	67	730	2	1,460	20	29,202	0.03	0.00	0.00	0.00	0.37	0.02
									Totals:	0.36	0.04	0.03	0.04	4.12	0.27

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	Wells	Field	Sales
Ratio:	240	10	1

	Wells		Compressors					
Year	Drilled	Operating	Field	Sales	# Well Pads	# Operating Well Years	# Operating FC Years	# Operating SC Years
1	607	546	23	2	202	546	23	2
2	910	1,365	57	6	485	1,912	80	8
3	1,075	2,333	97	10	813	4,244	177	18
4	1,175	3,390	141	14	1,169	7,635	318	32
5	1,075	4,358	182	18	1,488	11,993	500	50
6	950	5,213	217	22	1,769	17,205	717	72
7	910	6,032	251	25	2,041	23,237	968	97
8	910	6,851	285	29	2,314	30,088	1,254	125
9	910	7,670	320	32	2,587	37,758	1,573	157
10	910	8,489	354	35	2,860	46,247	1,927	193
11	910	9,308	388	39	3,133	55,554	2,315	231
12	910	10,127	422	42	3,406	65,681	2,737	274
13	910	10,946	456	46	3,679	76,627	3,193	319
14	910	11,765	490	49	3,952	88,392	3,683	368
15	910	12,584	524	52	4,225	100,976	4,207	421
16	910	13,403	558	56	4,498	114,378	4,766	477
17	860	14,177	591	59	4,754	128,555	5,356	536
18	800	14,897	621	62	4,992	143,452	5,977	598
19	750	15,572	649	65	5,216	159,024	6,626	663
20	650	16,157	673	67	5,407	175,181	7,299	730
21	273	15,856	661	66	5,477	191,037	7,960	796
22	0	15,038	627	63	5,285	206,074	8,586	859
23	0	14,070	586	59	5,013	220,145	9,173	917
24	0	13,013	542	54	4,690	233,157	9,715	971
25	0	12,045	502	50	4,338	245,203	10,217	1,022
26	0	11,190	466	47	4,015	256,393	10,683	1,068
27	0	10,371	432	43	3,730	266,764	11,115	1,112
28	0	9,552	398	40	3,457	276,316	11,513	1,151
29	0	8,733	364	36	3,184	285,049	11,877	1,188
30	0	7,914	330	33	2,911	292,964	12,207	1,221
31	0	7,095	296	30	2,638	300,059	12,502	1,250
32	0	6,276	262	26	2,365	306,335	12,764	1,276
33	0	5,457	227	23	2,092	311,792	12,991	1,299
34	0	4,638	193	19	1,819	316,430	13,185	1,318
35	0	3,819	159	16	1,546	320,250	13,344	1,334
36	0	3,000	125	13	1,273	323,250	13,469	1,347
37	0	2,226	93	9	1,000	325,476	13,561	1,356
38	0	1,506	63	6	742	326,982	13,624	1,362
39	0	831	35	3	502	327,813	13,659	1,366
40	0	246	10	1	277	328,060	13,669	1,367
	18,225							

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	Operation and Maintenance Emissions						Construction Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
1	194.02	13.37	8.83	0.50	200.27	104.38	577.62	211.43	66.28	38.63	136.95	48.93
2	484.89	33.41	22.08	1.25	500.52	260.87	865.96	316.96	99.36	57.92	205.32	73.35
3	828.50	57.08	37.72	2.13	855.21	445.72	1,022.98	374.44	117.38	68.42	242.55	86.65
4	1,204.07	82.96	54.82	3.10	1,242.89	647.78	1,118.14	409.27	128.30	74.79	265.11	94.71
5	1,547.68	106.63	70.46	3.99	1,597.57	832.64	1,022.98	374.44	117.38	68.42	242.55	86.65
6	1,851.33	127.55	84.29	4.77	1,911.02	996.00	904.02	330.90	103.73	60.47	214.34	76.57
7	2,142.20	147.59	97.53	5.52	2,211.26	1,152.49	865.96	316.96	99.36	57.92	205.32	73.35
8	2,433.07	167.63	110.77	6.27	2,511.51	1,308.97	865.96	316.96	99.36	57.92	205.32	73.35
9	2,723.94	187.67	124.02	7.01	2,811.75	1,465.45	865.96	316.96	99.36	57.92	205.32	73.35
10	3,014.81	207.71	137.26	7.76	3,112.00	1,621.94	865.96	316.96	99.36	57.92	205.32	73.35
11	3,305.67	227.75	150.50	8.51	3,412.25	1,778.42	865.96	316.96	99.36	57.92	205.32	73.35
12	3,596.54	247.79	163.75	9.26	3,712.49	1,934.91	865.96	316.96	99.36	57.92	205.32	73.35
13	3,887.41	267.83	176.99	10.01	4,012.74	2,091.39	865.96	316.96	99.36	57.92	205.32	73.35
14	4,178.28	287.87	190.23	10.76	4,312.99	2,247.88	865.96	316.96	99.36	57.92	205.32	73.35
15	4,469.15	307.91	203.47	11.51	4,613.23	2,404.36	865.96	316.96	99.36	57.92	205.32	73.35
16	4,760.02	327.95	216.72	12.26	4,913.48	2,560.85	865.96	316.96	99.36	57.92	205.32	73.35
17	5,034.90	346.89	229.23	12.97	5,197.23	2,708.74	818.38	299.55	93.90	54.74	194.04	69.32
18	5,290.61	364.50	240.87	13.62	5,461.18	2,846.30	761.28	278.65	87.35	50.92	180.50	64.48
19	5,530.34	381.02	251.79	14.24	5,708.63	2,975.28	713.70	261.23	81.89	47.74	169.22	60.45
20	5,738.10	395.33	261.25	14.78	5,923.10	3,087.05	618.54	226.40	70.97	41.37	146.66	52.39
21							259.79	95.09	29.81	17.38	61.60	22.00
22							0.00	0.00	0.00	0.00	0.00	0.00
23							0.00	0.00	0.00	0.00	0.00	0.00
24							0.00	0.00	0.00	0.00	0.00	0.00
25							0.00	0.00	0.00	0.00	0.00	0.00
26							0.00	0.00	0.00	0.00	0.00	0.00
27							0.00	0.00	0.00	0.00	0.00	0.00
28							0.00	0.00	0.00	0.00	0.00	0.00
29							0.00	0.00	0.00	0.00	0.00	0.00
30							0.00	0.00	0.00	0.00	0.00	0.00
31							0.00	0.00	0.00	0.00	0.00	0.00
32							0.00	0.00	0.00	0.00	0.00	0.00
33							0.00	0.00	0.00	0.00	0.00	0.00
34							0.00	0.00	0.00	0.00	0.00	0.00
35							0.00	0.00	0.00	0.00	0.00	0.00
36							0.00	0.00	0.00	0.00	0.00	0.00
37							0.00	0.00	0.00	0.00	0.00	0.00
38							0.00	0.00	0.00	0.00	0.00	0.00
39							0.00	0.00	0.00	0.00	0.00	0.00
40							0.00	0.00	0.00	0.00	0.00	0.00
	62,216	4,286	2,833	160	64,221	33,471	17,343	6,348	1,990	1,160	4,112	1,469

	Combined Construction & Operation and Maintenance Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs
1	771.64	224.79	75.11	39.13	337.23	153.31
2	1,350.85	350.37	121.44	59.17	705.84	334.21
3	1,851.47	431.52	155.10	70.56	1,097.75	532.37
4	2,322.20	492.22	183.12	77.89	1,508.00	742.49
5	2,570.65	481.07	187.84	72.41	1,840.12	919.29
6	2,755.36	458.45	188.02	65.23	2,125.36	1,072.57
7	3,008.16	464.55	196.89	63.44	2,416.58	1,225.83
8	3,299.03	484.59	210.14	64.19	2,716.83	1,382.32
9	3,589.90	504.63	223.38	64.94	3,017.07	1,538.80
10	3,880.77	524.67	236.62	65.68	3,317.32	1,695.29
11	4,171.63	544.71	249.87	66.43	3,617.56	1,851.77
12	4,462.50	564.75	263.11	67.18	3,917.81	2,008.26
13	4,753.37	584.79	276.35	67.93	4,218.06	2,164.74
14	5,044.24	604.83	289.59	68.68	4,518.30	2,321.23
15	5,335.11	624.87	302.84	69.43	4,818.55	2,477.71
16	5,625.98	644.91	316.08	70.18	5,118.80	2,634.20
17	5,853.28	646.44	323.14	67.70	5,391.26	2,778.05
18	6,051.90	643.15	328.23	64.54	5,641.68	2,910.79
19	6,244.04	642.25	333.68	61.98	5,877.85	3,035.73
20	6,356.65	621.74	332.22	56.15	6,069.75	3,139.44
21	259.79	95.09	29.81	17.38	61.60	22.00
22	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00
32	0.00	0.00	0.00	0.00	0.00	0.00
33	0.00	0.00	0.00	0.00	0.00	0.00
34	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00
36	0.00	0.00	0.00	0.00	0.00	0.00
37	0.00	0.00	0.00	0.00	0.00	0.00
38	0.00	0.00	0.00	0.00	0.00	0.00
39	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00
	79,559	**10,634**	**4,823**	**1,320**	**68,333**	**34,940**

	Emission Factors per Well					
	NOx	PM10	PM2.5	SO2	CO	VOCs
Op	0.355147	0.024468	0.016169	0.000915	0.366596	0.191066
Con	0.951605	0.348313	0.109191	0.063649	0.225624	0.080604

A.1.5 Emission Points Alt H Rev. CBNG

	A	B	C	D	E	G	H	I	J	K	L
1	SEIS RFD Emission Points by Watershed					Construction Emissions per Point (tons)					
2	Longitude	Latitude	Watershed	County	Construction Wells represented by point	NOx	PM10	PM2.5	SO2	CO	VOCs
3	-108.9441365	45.17350559	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
4	-108.9547988	45.02511074	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
5	-109.0888964	45.29528577	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
6	-109.0499645	45.44325647	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
7	-105.5441521	45.01011264	LITTLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
8	-105.4367862	45.14408638	LITTLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
9	-107.6163493	46.03435575	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
10	-107.2566985	45.82981624	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
11	-107.2689192	45.9319004	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
12	-107.2371025	45.91155283	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
13	-107.2876139	45.87320735	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
14	-107.3704664	45.9433915	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
15	-107.3833798	45.91986854	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
16	-107.2206782	45.78953449	LOWER BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
17	-105.8950719	45.32372874	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
18	-106.1906473	45.04845919	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
19	-106.127224	45.0482058	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
20	-106.0662494	45.0463265	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
21	-106.0192953	45.08316794	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
22	-106.0850023	45.08521834	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
23	-106.150915	45.08390454	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
24	-106.2145762	45.08081906	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
25	-105.9627608	45.12005428	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
26	-106.1962674	45.11191918	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
27	-106.1351194	45.11174049	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
28	-106.0714183	45.11478024	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
29	-106.0125111	45.11626908	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
30	-105.8058573	45.39278421	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
31	-106.000915	45.15088418	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
32	-106.0575099	45.14932839	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
33	-106.1091992	45.15092488	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
34	-106.1658912	45.1476511	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
35	-106.2270788	45.14781278	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
36	-105.957088	45.15485509	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
37	-105.8427057	45.47897521	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
38	-105.7670751	45.58143586	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
39	-105.7724857	45.67659425	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
40	-105.7938829	45.78061951	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
41	-105.7968544	45.87902714	LOWER TONGUE	Custer	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
42	-105.8384004	45.56452059	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
43	-106.2169993	45.59975321	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
44	-106.1245521	45.72872913	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
45	-106.1463546	45.51900756	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
46	-105.9185693	45.75201292	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
47	-105.9468395	45.84556398	LOWER TONGUE	Custer	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
48	-106.1199013	45.82426101	LOWER TONGUE	Custer	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
49	-106.1862006	45.74380863	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
50	-106.1732814	45.41523309	LOWER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
51	-107.1353247	45.7765741	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
52	-107.1853627	45.84829915	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
53	-107.1159668	45.83910419	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
54	-106.9493448	45.79823964	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
55	-106.9102423	45.80233865	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
56	-106.9500425	45.73349506	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
57	-107.1777591	45.90447616	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
58	-106.9564803	45.82575858	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
59	-106.9837523	45.77697522	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
60	-106.9834606	45.81344396	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
61	-106.9801085	45.85184712	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
62	-107.0672212	45.87672105	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
63	-106.985258	45.73936775	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
64	-106.9950453	45.7146349	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
65	-106.9791728	45.89239879	LOWER YELLOWSTONE-SUNDAY	Treasure	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
66	-106.9482033	45.76730492	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
67	-107.1261029	45.89324815	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787

	A	B	C	D	E	G	H	I	J	K	L
1	SEIS RFD Emission Points by Watershed					Construction Emissions per Point (tons)					
2	Longitude	Latitude	Watershed	County	Construction Wells represented by point	NOx	PM10	PM2.5	SO2	CO	VOCs
68	-108.1869611	46.42502531	MIDDLE MUSSELSHELL	Musselshell	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
69	-106.1538128	45.00373939	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
70	-106.0026151	45.00435919	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
71	-105.8748974	45.01191736	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
72	-105.7462246	45.01080066	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
73	-105.6336909	45.01434879	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
74	-105.5669066	45.06934218	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
75	-105.6792641	45.07010005	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
76	-105.6128423	45.3589134	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
77	-105.9277779	45.07416887	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
78	-105.8887584	45.1440493	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
79	-105.7869424	45.14067783	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
80	-105.6775808	45.13801376	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
81	-105.5802048	45.13566681	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
82	-105.5168432	45.22913207	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
83	-105.4800443	45.18955626	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
84	-105.5666423	45.17873365	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
85	-105.6981156	45.1886391	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
86	-105.4738774	45.26675596	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
87	-105.7368235	45.26935109	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
88	-105.784381	45.31966458	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
89	-105.703068	45.33537987	MIDDLE POWDER	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
90	-105.7215527	45.46134361	MIZPAH	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
91	-106.9962867	45.33689316	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
92	-106.9325316	45.33710215	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
93	-106.9621328	45.30947587	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
94	-106.994136	45.28023186	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
95	-106.9375915	45.27893984	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
96	-106.9579691	45.24610718	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
97	-106.881452	45.71725511	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
98	-106.757723	45.71928418	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
99	-106.6220247	45.72253455	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
100	-106.4959005	45.72421274	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
101	-106.3998157	45.78322101	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
102	-106.5306526	45.78510384	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
103	-106.6638756	45.78689404	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
104	-106.8020263	45.78531354	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
105	-106.3524423	45.8618565	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
106	-106.4549907	45.86135873	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
107	-106.5429837	45.86538099	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
108	-106.5808358	45.93247641	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
109	-106.4728256	45.92680484	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
110	-106.3890316	45.93117554	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
111	-106.324293	45.93602503	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
112	-106.2782499	45.98802101	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
113	-106.3614704	45.99537505	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
114	-106.4453652	45.99102485	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
115	-106.5432926	45.99197974	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
116	-106.5908348	46.04152496	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
117	-106.4639721	46.04316764	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
118	-106.37054	46.045603	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
119	-106.3032753	46.05037398	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
120	-106.3718811	46.10561053	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
121	-106.4461942	46.10431984	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
122	-106.5325503	46.10163267	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
123	-106.6275848	46.11575769	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
124	-106.5439175	46.1569001	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
125	-106.9475016	45.69484378	ROSEBUD	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
126	-106.4571953	46.16458578	ROSEBUD	Rosebud	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
127	-109.7578172	45.44657007	STILLWATER	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
128	-108.6823126	46.32003994	UPPER MUSSELSHELL	Musselshell	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787

	A	B	C	D	E	G	H	I	J	K	L
1	SEIS RFD Emission Points by Watershed					Construction Emissions per Point (tons)					
2	Longitude	Latitude	Watershed	County	Construction Wells represented by point	NOx	PM10	PM2.5	SO2	CO	VOCs
129	-106.8323923	45.00783236	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
130	-106.7903307	45.00602084	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
131	-106.9091138	45.05136249	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
132	-106.7465796	45.01595443	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
133	-106.7077379	45.03416601	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
134	-106.7475796	45.13008114	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
135	-106.6493939	45.093755	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
136	-106.6734747	45.07500148	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
137	-106.7245767	45.07472301	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
138	-106.6865526	45.05802281	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
139	-106.594975	45.04699579	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
140	-106.8194467	45.02325601	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
141	-106.5316421	45.01038326	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
142	-106.4704863	45.05358034	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
143	-106.4096151	45.01018167	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
144	-106.8651889	45.25176775	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
145	-106.8654241	45.22344433	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
146	-106.8622866	45.19582781	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
147	-106.7995346	45.25018769	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
148	-106.7985761	45.22419531	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
149	-106.7965835	45.19660405	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
150	-106.864485	45.0093902	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
151	-106.9621692	45.00774532	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
152	-106.9790408	45.02701546	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
153	-106.6726239	45.00857642	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
154	-106.6092737	45.01086998	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
155	-106.6399265	45.03636498	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
156	-106.747682	45.09523907	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
157	-106.3608313	45.00959182	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
158	-106.3042044	45.01032764	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
159	-106.2121315	45.00998408	UPPER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
160	-106.245271	45.03143069	UPPER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
161	-106.3293535	45.03623872	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
162	-106.3869384	45.03866439	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
163	-106.5377621	45.04123955	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
164	-106.4660257	45.01332086	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
165	-106.5617171	45.0709975	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
166	-106.2852399	45.06959453	UPPER TONGUE	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
167	-106.2487164	45.0547978	UPPER TONGUE	Powder River	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
168	-109.0890249	45.61690984	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
169	-109.0254773	45.5413516	UPPER YELLOWSTONE-LAKE BASIN	Carbon	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
170	-109.0528827	45.65712391	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
171	-109.0026382	45.62533653	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
172	-109.1067798	45.69927346	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
173	-109.0037776	45.69442736	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
174	-109.0537864	45.72626256	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
175	-109.0900954	45.76963276	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
176	-108.3574854	46.19133291	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
177	-107.8845271	46.21765128	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
178	-107.222593	45.425538	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
179	-107.278421	45.33934	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
180	-107.251687	45.280535	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
181	-107.17026	45.250393	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
182	-107.159928	45.205637	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
183	-107.234891	45.209166	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
184	-107.195872	45.13131	LITTLE BIGHORN	Big Horn	3.57	3.398589065	1.243974	0.389967	0.227317	0.805801	0.28787
185				**Totals**	**650**	**619**	**226**	**71**	**41**	**147**	**52**

	A	B	C	D	F	M	N	O	P	Q	R
1	SEIS RFD Emission Points by Watershed					Operation Emissions per Point (tons)					
2	Longitude	Latitude	Watershed	County	Operational Wells represented by point	NOx	PM10	PM2.5	SO2	CO	VOCs
3	-108.9441365	45.17350559	CLARKS FORK YELLOWSTONE	Carbon	99.45	35.31874	2.433331	1.608015	0.090957	36.45739	19.00118
4	-108.9547988	45.02511074	CLARKS FORK YELLOWSTONE	Carbon	100.35	35.63837	2.455353	1.622567	0.09178	36.78733	19.17314
5	-109.0888964	45.29528577	CLARKS FORK YELLOWSTONE	Carbon	99.45	35.31874	2.433331	1.608015	0.090957	36.45739	19.00118
6	-109.0499645	45.44325647	CLARKS FORK YELLOWSTONE	Carbon	100.35	35.63837	2.455353	1.622567	0.09178	36.78733	19.17314
7	-105.5441521	45.01011264	LITTLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
8	-105.4367862	45.14408638	LITTLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
9	-107.6163493	46.03435575	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
10	-107.2566985	45.82981624	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
11	-107.2689192	45.9319004	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
12	-107.2371025	45.91155283	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
13	-107.2876139	45.87320735	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
14	-107.3704664	45.9433915	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
15	-107.3833798	45.91986854	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
16	-107.2206782	45.78953449	LOWER BIGHORN	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
17	-105.8950719	45.32372874	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
18	-106.1906473	45.04845919	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
19	-106.127224	45.0482058	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
20	-106.0662494	45.0463265	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
21	-106.0192953	45.08316794	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
22	-106.0850023	45.08521834	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
23	-106.150915	45.08390454	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
24	-106.2145762	45.08081906	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
25	-105.9627608	45.12005428	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
26	-106.1962674	45.11191918	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
27	-106.1351194	45.11174049	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
28	-106.0714183	45.11478024	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
29	-106.0125111	45.11626908	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
30	-105.8058573	45.39278421	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
31	-106.000915	45.15088418	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
32	-106.0575099	45.14932839	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
33	-106.1091992	45.15092488	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
34	-106.1658912	45.1476511	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
35	-106.2270788	45.14781278	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
36	-105.957088	45.15485509	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
37	-105.8427057	45.47897521	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
38	-105.7670751	45.58143586	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
39	-105.7724857	45.67659425	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
40	-105.7939829	45.78061951	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
41	-105.7968544	45.87902714	LOWER TONGUE	Custer	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
42	-105.8384004	45.56452059	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
43	-106.2169993	45.59975321	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
44	-106.1245521	45.72872913	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
45	-106.1463546	45.51900756	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
46	-105.9185693	45.75201292	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
47	-105.9469395	45.84556398	LOWER TONGUE	Custer	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
48	-106.1199013	45.82426101	LOWER TONGUE	Custer	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
49	-106.1862006	45.74380863	LOWER TONGUE	Powder River	90.45	32.12242	2.213117	1.462491	0.082725	33.15803	17.28159
50	-106.1732814	45.41523309	LOWER TONGUE	Powder River	89.55	31.80279	2.191095	1.447938	0.081902	32.82809	17.10963
51	-107.1353247	45.7765741	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
52	-107.1853627	45.84829915	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
53	-107.1159668	45.83910419	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
54	-106.9493448	45.79823964	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
55	-106.9102423	45.80233865	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
56	-106.9500425	45.73349506	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
57	-107.1777591	45.90447616	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
58	-106.9564803	45.82575858	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	32.76168	2.25716	1.491596	0.084371	33.8179	17.62551
59	-106.9837523	45.77697522	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
60	-106.9834606	45.81344396	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	32.76168	2.25716	1.491596	0.084371	33.8179	17.62551
61	-106.9801085	45.85184712	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
62	-107.0672212	45.87672105	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	32.76168	2.25716	1.491596	0.084371	33.8179	17.62551
63	-106.985258	45.73936775	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
64	-106.9950453	45.7146349	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	32.76168	2.25716	1.491596	0.084371	33.8179	17.62551
65	-106.9791728	45.89239879	LOWER YELLOWSTONE-SUNDAY	Treasure	21.15	7.510764	0.517464	0.341955	0.019343	7.752907	4.040727
66	-106.9482033	45.76730492	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	33.08131	2.279181	1.506148	0.085195	34.14784	17.79747
67	-107.1261029	45.89324815	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	32.76168	2.25716	1.491596	0.084371	33.8179	17.62551

	A	B	C	D	F	M	N	O	P	Q	R
1	SEIS RFD Emission Points by Watershed					Operation Emissions per Point (tons)					
2	Longitude	Latitude	Watershed	County	Operational Wells represented by point	NOx	PM10	PM2.5	SO2	CO	VOCs
68	-108.1869611	46.42502531	MIDDLE MUSSELSHELL	Musselshell	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
69	-106.1538128	45.00373939	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
70	-106.0026151	45.00435919	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
71	-105.8748974	45.01191736	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
72	-105.7462246	45.01080066	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
73	-105.6336909	45.01434879	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
74	-105.5669066	45.06934218	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
75	-105.6792641	45.07010005	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
76	-105.6128423	45.3589134	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
77	-105.9277779	45.07416887	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
78	-105.8887584	45.1440493	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
79	-105.7869424	45.14067783	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
80	-105.6775808	45.13801376	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
81	-105.5802048	45.13566681	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
82	-105.5168432	45.22913207	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
83	-105.4800443	45.18955626	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
84	-105.5666423	45.17873365	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
85	-105.6981156	45.1886391	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
86	-105.4738774	45.26675596	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
87	-105.7368235	45.26935109	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
88	-105.784381	45.31966458	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
89	-105.703068	45.33537987	MIDDLE POWDER	Powder River	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
90	-105.7215527	45.46134361	MIZPAH	Powder River	111.15	39.47395	2.71961	1.797196	0.101658	40.74657	21.23665
91	-106.9962867	45.33689316	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
92	-106.9325316	45.33710215	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
93	-106.9621328	45.30947587	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
94	-106.994136	45.28023186	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
95	-106.9375915	45.27893984	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
96	-106.9579691	45.24610718	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
97	-106.881452	45.71725511	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
98	-106.757723	45.71928418	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
99	-106.6220247	45.72253455	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
100	-106.4959005	45.72421274	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
101	-106.3998157	45.78322101	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
102	-106.5306526	45.78510384	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
103	-106.6638756	45.78689404	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
104	-106.8020263	45.78531354	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
105	-106.3524423	45.8618565	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
106	-106.4549907	45.86135873	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
107	-106.5429837	45.86538099	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
108	-106.5608358	45.93247641	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
109	-106.4728256	45.92680484	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
110	-106.3890316	45.93117554	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
111	-106.324293	45.93602503	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
112	-106.2782499	45.98802101	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
113	-106.3614704	45.99537505	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
114	-106.4453652	45.99102485	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
115	-106.5432926	45.99197974	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
116	-106.5908348	46.04152496	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
117	-106.4639721	46.04316764	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
118	-106.37054	46.045603	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
119	-106.3032753	46.05037398	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
120	-106.3718811	46.10561053	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
121	-106.4461942	46.10431984	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
122	-106.5325503	46.10163267	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
123	-106.6275848	46.11575769	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
124	-106.5439175	46.1569001	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
125	-106.9475016	45.69484378	ROSEBUD	Big Horn	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
126	-106.4571953	46.16458578	ROSEBUD	Rosebud	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
127	-109.7578172	45.44657007	STILLWATER	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
128	-108.6823126	46.32003994	UPPER MUSSELSHELL	Musselshell	66.15	23.49236	1.618537	1.069576	0.0605	24.24974	12.63869

	A	B	C	D	F	M	N	O	P	Q	R
1	SEIS RFD Emission Points by Watershed					Operation Emissions per Point (tons)					
2	Longitude	Latitude	Watershed	County	Operational Wells represented by point	NOx	PM10	PM2.5	SO2	CO	VOCs
129	-106.8323923	45.00783236	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
130	-106.7903307	45.00602084	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
131	-106.9091138	45.05136249	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
132	-106.7465796	45.01595443	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
133	-106.7077379	45.03416601	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
134	-106.7475796	45.13008114	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
135	-106.6493939	45.093755	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
136	-106.6734747	45.07500148	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
137	-106.7245767	45.07472301	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
138	-106.6865526	45.05802281	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
139	-106.594975	45.04699579	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
140	-106.8194467	45.02325601	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
141	-106.5316421	45.01038326	UPPER TONGUE	Big Horn	86.12	30.58573	2.107244	1.392527	0.078768	31.57179	16.45486
142	-106.4704863	45.05358034	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
143	-106.4096151	45.01018167	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
144	-106.8651889	45.25176775	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
145	-106.8654241	45.22344433	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
146	-106.8622866	45.19582781	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
147	-106.7995346	45.25018769	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
148	-106.7985761	45.22419531	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
149	-106.7965835	45.19660405	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
150	-106.864485	45.0093902	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
151	-106.9621692	45.00774532	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
152	-106.9790408	45.02701546	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
153	-106.6726239	45.00857642	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
154	-106.6092737	45.01086998	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
155	-106.6399265	45.03636498	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
156	-106.747682	45.09523907	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
157	-106.3608313	45.00959182	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
158	-106.3042044	45.01032764	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
159	-106.2121315	45.00998408	UPPER TONGUE	Powder River	87.02	30.90536	2.129266	1.40708	0.079591	31.90173	16.62682
160	-106.245271	45.03143069	UPPER TONGUE	Powder River	87.02	30.90536	2.129266	1.40708	0.079591	31.90173	16.62682
161	-106.3293535	45.03623872	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
162	-106.3869384	45.03866439	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
163	-106.5377621	45.04123955	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
164	-106.4660257	45.01332086	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
165	-106.5617171	45.0709975	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
166	-106.2852399	45.06959453	UPPER TONGUE	Big Horn	85.22	30.2661	2.085223	1.377975	0.077945	31.24186	16.2829
167	-106.2467164	45.05477978	UPPER TONGUE	Powder River	87.02	30.90536	2.129266	1.40708	0.079591	31.90173	16.62682
168	-109.0890249	45.61690984	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
169	-109.0254773	45.5413516	UPPER YELLOWSTONE-LAKE BASIN	Carbon	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
170	-109.0528827	45.65712391	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
171	-109.0026382	45.62533653	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
172	-109.1067798	45.69927346	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
173	-109.0037776	45.69442736	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
174	-109.0537864	45.72626256	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
175	-109.0900954	45.76963276	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
176	-108.3574854	46.19133291	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
177	-107.8845271	46.21765128	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	88.65	31.48315	2.169074	1.433386	0.081079	32.49815	16.93767
178	-107.222593	45.425538	LITTLE BIGHORN	Big Horn	97.71	34.70289	2.390902	1.579976	0.089371	35.82169	18.66986
179	-107.278421	45.33934	LITTLE BIGHORN	Big Horn	95.91	34.06363	2.346859	1.550871	0.087724	35.16182	18.32594
180	-107.251687	45.280535	LITTLE BIGHORN	Big Horn	95.91	34.06363	2.346859	1.550871	0.087724	35.16182	18.32594
181	-107.17026	45.250393	LITTLE BIGHORN	Big Horn	95.91	34.06363	2.346859	1.550871	0.087724	35.16182	18.32594
182	-107.159928	45.205637	LITTLE BIGHORN	Big Horn	95.91	34.06363	2.346859	1.550871	0.087724	35.16182	18.32594
183	-107.234891	45.209166	LITTLE BIGHORN	Big Horn	95.91	34.06363	2.346859	1.550871	0.087724	35.16182	18.32594
184	-107.195872	45.13131	LITTLE BIGHORN	Big Horn	97.71	34.70289	2.390902	1.579976	0.089371	35.82169	18.66986
185				**Totals**	**16,157**	**5,738**	**395**	**261**	**15**	**5,923**	**3,087**

A.2.1 Emission Calculations for the Montana Conventional O&G Project Construction Activities – Alternative H Revised

Fugitive Dust Emissions

Emission Factors for Construction Activities

				Reference
E	=	1.2 Tons of TSP/acre/month		EPA, AP-42, Volume I, Section 13.2.3 Heavy Construction Operations (1/95)
PM10	=	26 % of TSP		Argonne National Laboratory - 2002 TSD
PM2.5	=	15 % of PM10		Argonne National Laboratory - 2002 TSD
CE	=	50 %	Control Efficiency for watering	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emission Calculations for Construction Activities

Area Disturbed for CBNG Wells	Emission Estimation Basis	Disturbed Area (acre)	Avg. # of Days to Complete	Total # of Well Pads or Stations	Total Disturbed Area	Emissions (lb/well)			Emissions (ton/project)		
						TSP	PM10	PM2.5	TSP	PM10	PM2.5
Bladed Road	per Well Pad	0.5	3	1,730	865	60	16	2	52	13	2
Well Pad	per Well Pad	0.5	3	1,730	865	60	16	2	52	13	2
				Total	**1,730**				**104**	**27**	**4**

Exhaust Emissions

Emission Factors for Construction Equipment EPA, AP-42, Volume II, Section 11-7 Heavy-Duty Construction Equipment (9/85)

Equipment	Emission Factors (g/hp-hr)					Equipment Category in AP-42
	NOx	PM10	SO2	CO	VOCs	
Dozer	7.81	0.69	0.85	2.15	0.75	Track-Type Tractor
Blade	7.14	0.63	0.87	1.54	0.36	Motor Grader

Emissions Estimation for Construction Equipment

Construction Site	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well	# of Operating Hours per Well Pad or per Station	# of Well Pads or Stations	Emissions (lb/well pad, lb/stn, or lb/project)					Emissions (ton/equipment type)					Emissions (ton/construction site)				
									NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Bladed Road	Blade	100	1	75	10	2	20	1,730	24	2	3	5	1	20	2	2	4	1					
Well Pad	Blade	100	1	75	10	3	30	1,730	35.4	3.1	4.3	7.6	1.8	31	3	4	7	2	51	5	6	11	3
	Dozer	150	1	80	10	3	30	1,730	62	5	7	17	6	54	5	6	15	5	54	5	6	15	5
													Subtotal:	105	9	12	26	8	105	9	12	26	8

Emission Factors for Industrial Engines

Emission Source	Fuel Type	Emission Factors						
		Unit	NOx	PM10	SOx	CO	VOCs	
Industrial Engine >600 hp	Diesel	lb/hp-hr	3.10E-02	2.20E-03	2.05E-03	6.68E-03	2.51E-03	EPA, AP-42, Volume I, Section 3.4 Gasoline and Industrial Engines
Industrial Engine <600 hp	Diesel	lb/hp-hr	2.40E-02	7.00E-04	3.24E-03	5.50E-03	6.42E-04	EPA, AP-42, Volume I, Section 3.4 Large Stationary Diesel and All Stationary Dual-Fired Engines (10/96)
Flaring	Natural Gas	lb/MMCF	69	7.6	0.6	377	64	EPA, AP-42, Volume I, Section 13.5 Industrial Flares & Section 1.4 Natural Gas Combustion

Emissions Estimation for Industrial Engines

Construction Site Activity	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well	# of Operating Hours per Well	# of Wells	Emissions (lb/well)					Emissions (ton/equipment type)					Emissions (ton/project activity)				
									NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Main Deck	1,000	3	70	24	16	384	1,730	19,354	564	2,613	4,435	518	16,741	488	2,260	3,836	448	19,444	680	2,439	4,419	667
	Auxillary Pump	600	1	80	8	15	120	1,730	1,786	127	118	385	145	1,545	110	102	333	125					
	Generators	150	2	75	24	8	192	1,730	1,339	95	89	289	108	1,158	82	77	250	94					
Well Completion & Testing	Main Deck	600	1	50	11	5	55	1,730	512	36	34	110	41	442	31	29	95	36	632	46	40	268	72
	Auxillary Pump	225	1	80	8	2	16	1,730	89	6	6	19	7	77	5	5	17	6					
	Power Swivel	150	1	75	8	2	16	1,730	56	4	4	12	5	48	3	3	10	4					
	Equipment Type	**Capacity (kw)**	**Avg # of Wells Served**	**Avg. Load Factor (%)**	**# of Operating Hours per Day**	**Avg. # of Operating Days**	**# of Operating Hours per Well**	**# of Wells**															
	Field Generators for Pumps & Lighting	40	1	75	12	3	36	1,730	45	3	3	10	4	39	3	3	8	3					
	Emission Source	**Average Volume Flared (MCFD/well)**			**Average # Days of Continuous Flaring**			**# of Wells**															
	Flaring of Natural Gas	60			7			1,730	29	3.2	0.3	158	27	25	3	0	137	23					
													Subtotal:	20,076	726	2,479	4,687	739	20,076	726	2,479	4,687	739
													Total:	20,180	735	2,491	4,712	747	20,180	735	2,491	4,712	747

PM2.5 is assumed to be same as PM10

Road Dust Emissions

Emission Factors for Road Traffic

$$E\ (lb/VMT) = \frac{k\ (s/12)^a\ (W/3)^b}{(M/0.2)^c}$$

Parameter	PM10	PM2.5
k	2.6	0.38
a	0.8	0.8
b	0.4	0.4
c	0.3	0.3

Source: EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)

Function/Variable Description	Assumed Value	Reference
E = size-specific emission factor (lb/VMT)		
s = surface material silt content (%)	5.1	EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
W = mean vehicle weight (tons)	listed in table below	
M = surface material moisture content (%)	0.2	Default value in EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
CE = control efficiency for watering (%)	50	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emissions Estimation for Road Traffic

Construction Site Destination	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Road	Semi Trucks	65,000	2	47	94	1,730	1.70	160	138		0.25	23	20	
	Pickup Trucks	7,000	2	3	6	1,730	0.70	4	4	142	0.10	0.6	0.5	21
Well Pad	Semi Trucks	65,000	2	5	10	1,730	1.70	17	15		0.25	2	2	
	Pickup Trucks	7,000	2	4	8	1,730	0.70	6	5	20	0.10	1	1	3
Other Construction Activities	Semi Trucks	80,000	2	2	4	1,730	1.85	7	6		0.27	1	1	
	Haul Trucks	45,000	2	2	4	1,730	1.47	6	5		0.21	1	1	
	Pickup Trucks	7,000	2	1	2	1,730	0.70	1	1	13	0.10	0	0	2
								Subtotal:	**174**	**174**			**25**	**25**

Road Dust Emissions (Continued)

Emissions Estimation for Road Traffic Continued

Construction Site Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well)	Emissions (ton/veh. type)	Emissions (ton/proj. activity)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	60,000	2	44	88	1,730	1.65	145	125		0.24	21	18	
	Fuel Haul Truck	50,000	2	6	12	1,730	1.53	18	16		0.22	3	2	
	Mud Haul Truck, Water Hauling	60,000	2	4	8	1,730	1.65	13	11		0.24	2	2	
	Rig Crew	7,000	2	51	102	1,730	0.70	71	62		0.10	10	9	
	Rig Mechanics	12,000	2	2	4	1,730	0.87	3	3	281	0.13	1	0	41
	Co. Supervisor	7,000	2	20	40	1,730	0.70	28	24		0.10	4	4	
	Tool Pusher	7,000	2	8	16	1,730	0.70	11	10		0.10	2	1	
	Mud Logger	7,000	2	6	12	1,730	0.70	8	7		0.10	1	1	
	Mud Engineer	7,000	2	15	30	1,730	0.70	21	18		0.10	3	3	
	Logger, Engr. Truck	45,000	2	1	2	1,730	1.47	3	3		0.21	0	0	
	Drill Bit Delivery	7,000	2	2	4	1,730	0.70	3	2		0.10	0	0	
Well Completion & Testing	Semi Casing Haulers	60,000	2	6	12	1,730	1.65	20	17		0.24	3	2	
	Semi Completion, Unit Rig	120,000	2	1	2	1,730	2.17	4	4		0.32	1	1	
	Semi Pumping/Tank Battery	80,000	2	6	12	1,730	1.85	22	19		0.27	3	3	
	Tubing Truck	60,000	2	2	4	1,730	1.65	7	6		0.24	1	1	
	Haul Cementer, Pump Truck	85,000	2	2	4	1,730	1.89	8	7		0.28	1	1	
	Haul Cementer, Cement Truck	60,000	2	3	6	1,730	1.65	10	9		0.24	1	1	
	Haul Completion, Equip. Truck	45,000	2	3	6	1,730	1.47	9	8		0.21	1	1	
	Haul Service Tools	7,000	2	2	4	1,730	0.70	3	2		0.10	0	0	
	Haul Preforators, Logging Truck	45,000	2	1	2	1,730	1.47	3	3		0.21	0	0	
	Haul Anchor, Installation	40,000	2	1	2	1,730	1.40	3	2		0.20	0	0	
	Haul Anchor, Testing	12,000	2	1	2	1,730	0.87	2	1	556	0.13	0	0	81
	Haul Welders	12,000	2	6	12	1,730	0.87	10	9		0.13	2	1	
	Haul Water Truck	60,000	2	150	300	1,730	1.65	494	427		0.24	72	62	
	Pickup Cementor, Engineer	7,000	2	2	4	1,730	0.70	3	2		0.10	0	0	
	Pickup Casing Crew	10,000	2	2	4	1,730	0.80	3	3		0.12	0	0	
	Pickup Completion Crew	10,000	2	5	10	1,730	0.80	8	7		0.12	1	1	
	Pickup Completion, Pusher	7,000	2	5	10	1,730	0.70	7	6		0.10	1	1	
	Pickup Perforators, Engineer	7,000	2	2	4	1,730	0.70	3	2		0.10	0	0	
	Pickup Co. Supervisor	7,000	2	10	20	1,730	0.70	14	12		0.10	2	2	
	Pickup Miscellaneous Supplies	7,000	2	3	6	1,730	0.70	4	4		0.10	1	1	
	Pickup Roustabout Crew	12,000	2	4	8	1,730	0.87	7	6		0.13	1	1	
								Subtotal:	837	837			122	122
								Total:	1,011	1,011			148	148

Exhaust Emissions

Vehicle		Emission Factors (g/mi)					
Type	Class	NOx	PM10	PM2.5	SO2	CO	VOCs
Light-Duty Gasoline Truck	LDGT2	1.01	0.10	0.08	0.11	11.64	0.75
Heavy-Duty Diesel Truck	HDDV	8.13	1.96	1.81	1.63	17.09	4.83

PM10 and PM2.5 were estimated using the EPA PARTS model (1995) and include tire and break wear emissions.

Source: EPA, AP-42, Volume II, Appendix H-117, Table 3.1A.2 Light-Duty Gasoline Powered Trucks and
Appendix H-259, Table 7.1.2 Heavy-Duty Diesel Powered Vehicles (High Altitude; Model Year 1991-1997; 50,000 mileage) (6/30/95)

Emissions Estimation for Road Traffic Exhaust

Construction Site Destination	Vehicle		Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells	Emissions																	
							(lb/well pad, lb/station, or lb/project)						(ton/equipment type)						(ton/construction site)					
	Type	Class					NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Bladed road	Semi Trucks	HDDV	2	47	94	1,730	1.68	0.41	0.38	0.34	3.54	1.00	1.5	0.4	0.3	0.3	3.1	0.9	1.46	0.35	0.32	0.29	3.06	0.87
	Pickup Trucks	LDGT2	2	3	6	1,730	0.01	0.00	0.00	0.00	0.15	0.01	0.0	0.0	0.0	0.0	0.1	0.0						
Well Pad	Semi Trucks	HDDV	2	5	10	1,730	0.18	0.04	0.04	0.04	0.38	0.11	0.2	0.0	0.0	0.0	0.3	0.1	0.17	0.04	0.04	0.03	0.50	0.10
	Pickup Trucks	LDGT2	2	4	8	1,730	0.02	0.00	0.00	0.00	0.21	0.01	0.0	0.0	0.0	0.0	0.2	0.0						
Other Construction Activities	Semi Trucks	HDDV	2	2	4	1,730	0.07	0.02	0.02	0.01	0.15	0.04	0.1	0.0	0.0	0.0	0.1	0.0	0.13	0.03	0.03	0.03	0.31	0.08
	Haul Trucks	HDDV	2	2	4	1,730	0.07	0.02	0.02	0.01	0.15	0.04	0.1	0.0	0.0	0.0	0.1	0.0						
	Pickup Trucks	LDGT2	2	1	2	1,730	0.00	0.00	0.00	0.00	0.05	0.00	0.0	0.0	0.0	0.0	0.0	0.0						
												Subtotal	0	0	0	0	1	0	1.8	0.4	0.4	0.4	3.9	1.0

Exhaust Emissions (continued)

Construction Site Activity	Vehicle		Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	Emissions																	
							(lb/well pad, lb/station, or lb/project)						(ton/equipment type)						(ton/construction site)					
	Type	Class					NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6	18.0	4.1	3.8	3.5	50.5	10.9
	Fuel Haul Truck	HDDV	6	2	12	18,225	0.22	0.05	0.05	0.04	0.45	0.13	2.0	0.5	0.4	0.4	4.1	1.2						
	Mud Haul Truck, Water Hauling	HDDV	6	7	42	18,225	0.75	0.18	0.17	0.15	1.58	0.45	6.9	1.7	1.5	1.4	14.4	4.1						
	Rig Crew	LDGT2	6	3	18	18,225	0.04	0.00	0.00	0.00	0.46	0.03	0.4	0.0	0.0	0.0	4.2	0.3						
	Co. Supervisor	LDGT2	6	8	48	18,225	0.11	0.01	0.01	0.01	1.23	0.08	1.0	0.1	0.1	0.1	11.2	0.7						
	Tool Pusher	HDDV	6	6	36	18,225	0.65	0.16	0.14	0.13	1.36	0.38	5.9	1.4	1.3	1.2	12.4	3.5						
	Logger, Engr. Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
Well Completion & Testing	Semi Casing	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6	20.1	4.8	4.4	4.0	46.8	12.0
	Semi Completion, Unit Rig	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Tubing Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Cementer, Pump Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Cementer, Cement Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Completion, Equip. Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Preforators, Logging Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Welders	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Water Truck	HDDV	6	10	60	18,225	1.08	0.26	0.24	0.22	2.26	0.64	9.8	2.4	2.2	2.0	20.6	5.8						
	Pickup Cementor, Engineer	LDGT2	6	1	6	18,225	0.01	0.00	0.00	0.00	0.15	0.01	0.1	0.0	0.0	0.0	1.4	0.1						
	Pickup Co. Supervisor	LDGT2	6	2	12	18,225	0.03	0.00	0.00	0.00	0.31	0.02	0.2	0.0	0.0	0.0	2.8	0.2						
	Pickup Miscellaneous Supplies	LDGT2	6	1	6	18,225	0.01	0.00	0.00	0.00	0.15	0.01	0.1	0.0	0.0	0.0	1.4	0.1						
	Pickup Roustabout Crew	HDDV	6	2	12	18,225	0.22	0.05	0.05	0.04	0.45	0.13	2.0	0.5	0.4	0.4	4.1	1.2						
												Subtotal:	38	9	8	7	97	23	38	9	8	7	97	23
												Total:	50	11	10	10	146	30	50	11	10	10	146	30

A.2.2 Emission Calculations for the Montana Conventional O&G Project Operational Activities – Alternative H Revised

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	PM10 Emissions			PM2.5 Emissions		
							Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
								(lb/well)	(ton/project)		(lb/well)	(ton/project)
Well Workover	WO Rig	120,000	2	1	2	1,730	3.20	6	6	0.47	1	1
	Haul Truck	60,000	2	1	2	1,730	2.43	5	4	0.35	1	1
	Pickup Truck	7,000	2	3	6	1,730	1.03	6	5	0.15	1	1
									15			2

Exhaust Emissions – On-site

Emissions Estimation for Industrial Engines:

Activity	Equipment	Capacity (hp)	Operating Hours per Day	# Operating Days per Well	# Operating Hours per Well	Total # of Wells Drilled	Emissions									
							(lb/well)					(ton/project)				
							NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Well Workover	Truck-Mounted Unit	600	10	3	30	1,730	558	40	37	120	45	483	34	32	104	39

Exhaust Emissions – On-road

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	Emissions											
	Type	Class					(lb/station-yr)						(ton/project)					
							NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Well Workover	WO Rig	HDDV	2	1	2	1,730	4.E-02	9.E-03	8.E-03	7.E-03	8.E-02	2.E-02	3.E-02	7.E-03	7.E-03	6.E-03	7.E-02	2.E-02
	Haul Truck	HDDV	2	1	2	1,730	4.E-02	9.E-03	8.E-03	7.E-03	8.E-02	2.E-02	3.E-02	7.E-03	7.E-03	6.E-03	7.E-02	2.E-02
	Pickup Truck	LDGT2	2	3	6	1,730	1.E-02	1.E-03	1.E-03	1.E-03	2.E-01	1.E-02	1.E-02	1.E-03	9.E-04	1.E-03	1.E-01	9.E-03
													7.E-02	**2.E-02**	**1.E-02**	**1.E-02**	**3.E-01**	**5.E-02**

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	PM10 Emissions			PM2.5 Emissions		
								Controlled Em. Factor (lb/VMT)	Emissions (lb/ well)	Emissions (ton/ project)	Controlled Em. Factor (lb/VMT)	Emissions (lb/ well)	Emissions (ton/ project)
Visits for Inspection and Repair	200-hp Pickup	7,000	2	1	12	24.0	19,644	1.03	24.7	243	0.15	3.6	35

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	Emissions (lb/station-yr)						Emissions (ton/project)					
	Type	Class						NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Visits for Inspection and Repair	200-hp Pickup	LDGT2	2	1	12	24.0	19,644	0.053	0.005	0.004	0.006	0.616	0.040	0.5	0.1	0.0	0.1	6.0	0.4

A.2.3 Emission Calculations for the Montana Conservation O&G Project Maintenance Activities – Alternative H Revised

Road Maintenance – Heavy Equipment

Given Data:

Maintenance	Equipment/Vehicle			Road Length Worked On per Day (mi)	# of Operating Hours per Day
	Type	Fuel	Capacity (hp)		
Summer	Heavy Equipment	Diesel	135	6	10
	Commuting Vehicle	Gasoline	225	6	1
Winter	Heavy Equipment	Diesel	135	5	10
	Commuting Vehicle	Gasoline	225	6	1.5

Estimation of Total and Cumulative Length of Roads:

Length of Bladed Roads per Well (mi)	1
Total Length of Roads to be Built (mi)	1,730
Cummulative Length of Roads Maintained (mi-yr)	19,644

Estimation of Total Operation Days and Hours:

Season	# of Operation per Year	Cummulative Length of Roads (mi-yr)	Road Length Worked On (mi/day)	# of Operating Hours per Day	Total # of Operating Days	Total # of Operating Hours
Summer	2	19,644	6	10	6,548	65,480
Winter	1	19,644	5	10	3,929	39,288
				Totals:	10,477	104,768

Fugitive Dust Emissions

Emissions Factor for Grader - Road Dust:

Pollutant	Emission Factor Equation (lb/VMT)	S (mph)	Emission Factor (lb/VMT)
PM10	E = (0.6)(0.051)(S^2)	5	0.765
PM2.5	E = (0.031)(0.051)(S^2.5)	5	0.069

Emissions Estimation for Grader - Road Dust:

Activity	Equipment	Total # of Operating Hours	Mean Vehicle Speed (mph)	Total Miles Maintained	PM10		PM2.5	
					Em. Factor (lb/VMT)	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/project)
Road Maintenance	Grader	62,861	5	314,304	0.765	120	0.069	11

Exhaust Emissions

Emissions Factor for Grader - Exhaust:

Equipment	Emission Factors (g/hp-hr)				
	NOx	PM10	SO2	CO	VOCs
Grader	7.14	0.63	0.87	1.54	0.36

Emissions Estimation for Grader - Road Dust:

Activity	Vehicle Type	Capacity (hp)	Total # of Operating Hours	Emissions									
				(lb/well)					(ton/project)				
				NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Road Maintenance	Grader	135	62,861	2.13	0.19	0.26	0.46	0.11	67	6	8	14	3

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	PM10		PM2.5	
						Em. Factor (lb/VMT)	Emissions (ton/ project)	Em. Factor (lb/VMT)	Emissions (ton/ project)
Road Maintenance	Pickup Truck	7,000	6	10,477	62,861	1.03	32	0.15	5

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	Emissions (ton/project)					
	Type	Class				NOx	PM10	PM2.5	SO2	CO	VOCs
Road Maintenance	Pickup Truck	LDGT2	6	10,477	62,861	0.07	0.01	0.01	0.01	0.81	0.05

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Total Drilled: 1730 per Year: variable

	Wells			
Year	Drilled	Operating	# Operating Well Years	Distribution
1	52	52	52	0.03
2	69	121	173	0.04
3	87	208	381	0.05
4	112	320	701	0.065
5	121	441	1,142	0.07
6	121	562	1,704	0.07
7	121	683	2,387	0.07
8	112	796	3,183	0.065
9	112	908	4,091	0.065
10	104	1,012	5,104	0.06
11	104	1,116	6,219	0.06
12	87	1,202	7,422	0.05
13	87	1,289	8,711	0.05
14	78	1,367	10,077	0.045
15	69	1,436	11,513	0.04
16	69	1,505	13,018	0.04
17	69	1,574	14,593	0.04
18	61	1,635	16,227	0.035
19	52	1,687	17,914	0.03
20	43	1,730	19,644	0.025
21	0	1,730		
22	0	1,730		
23	0	1,730		
24	0	1,730		
25	0	1,730		
26	0	1,730		
27	0	1,730		
28	0	1,730		
29	0	1,730		
30	0	1,730		
31	0	1,730		
32	0	1,730		
33	0	1,730		
34	0	1,730		
35	0	1,730		
36	0	1,730		
37	0	1,730		
38	0	1,730		
39	0	1,730		
40	0	1,730		
	1,730			

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	Operation and Maintenance Emissions						Construction Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
1	1.45	1.19	0.25	0.11	0.33	0.11	605.72	53.27	26.68	74.79	142.15	22.59
2	3.39	2.78	0.58	0.25	0.77	0.26	807.62	71.03	35.57	99.73	189.53	30.12
3	5.81	4.76	0.99	0.42	1.33	0.45	1,009.53	88.79	44.46	124.66	236.92	37.65
4	8.96	7.34	1.52	0.65	2.05	0.70	1,312.38	115.43	57.80	162.06	307.99	48.94
5	12.35	10.12	2.10	0.90	2.82	0.96	1,413.34	124.31	62.24	174.52	331.68	52.70
6	15.75	12.90	2.67	1.15	3.59	1.23	1,413.34	124.31	62.24	174.52	331.68	52.70
7	19.14	15.68	3.25	1.40	4.37	1.49	1,413.34	124.31	62.24	174.52	331.68	52.70
8	22.29	18.26	3.78	1.63	5.09	1.74	1,312.38	115.43	57.80	162.06	307.99	48.94
9	25.44	20.84	4.32	1.86	5.80	1.99	1,312.38	115.43	57.80	162.06	307.99	48.94
10	28.34	23.22	4.81	2.07	6.47	2.21	1,211.43	106.55	53.35	149.59	284.30	45.17
11	31.25	25.60	5.30	2.28	7.13	2.44	1,211.43	106.55	53.35	149.59	284.30	45.17
12	33.67	27.59	5.72	2.46	7.68	2.63	1,009.53	88.79	44.46	124.66	236.92	37.65
13	36.09	29.57	6.13	2.63	8.24	2.82	1,009.53	88.79	44.46	124.66	236.92	37.65
14	38.27	31.36	6.50	2.79	8.73	2.99	908.57	79.91	40.01	112.19	213.22	33.88
15	40.21	32.94	6.83	2.93	9.18	3.14	807.62	71.03	35.57	99.73	189.53	30.12
16	42.15	34.53	7.15	3.08	9.62	3.29	807.62	71.03	35.57	99.73	189.53	30.12
17	44.09	36.12	7.48	3.22	10.06	3.44	807.62	71.03	35.57	99.73	189.53	30.12
18	45.78	37.51	7.77	3.34	10.45	3.57	706.67	62.15	31.12	87.26	165.84	26.35
19	47.24	38.70	8.02	3.45	10.78	3.69	605.72	53.27	26.68	74.79	142.15	22.59
20	48.45	39.69	8.22	3.53	11.06	3.78	504.76	44.39	22.23	62.33	118.46	18.82
21												
22												
23												
24												
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35												
36												
37												
38												
39												
40												
	550	**451**	**93**	**40**	**126**	**43**	**20,191**	**1,776**	**889**	**2,493**	**4,738**	**753**

	Combined Construction & Operation and Maintenance Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs
1	607.17	54.46	26.92	74.90	142.48	22.70
2	811.01	73.81	36.14	99.97	190.31	30.38
3	1,015.34	93.55	45.45	125.08	238.24	38.10
4	1,321.35	122.77	59.32	162.71	310.03	49.64
5	1,425.69	134.43	64.34	175.42	334.50	53.67
6	1,429.08	137.21	64.92	175.67	335.27	53.93
7	1,432.47	139.98	65.49	175.92	336.05	54.20
8	1,334.67	133.68	61.58	163.68	313.08	50.68
9	1,337.82	136.26	62.12	163.91	313.79	50.92
10	1,239.77	129.77	58.16	151.66	290.77	47.39
11	1,242.68	132.15	58.66	151.87	291.43	47.61
12	1,043.20	116.38	50.18	127.11	244.60	40.27
13	1,045.62	118.36	50.59	127.29	245.15	40.46
14	946.85	111.27	46.51	114.98	221.96	36.87
15	847.83	103.98	42.39	102.66	198.71	33.25
16	849.77	105.56	42.72	102.80	199.15	33.41
17	851.71	107.15	43.05	102.94	199.59	33.56
18	752.45	99.66	38.89	90.60	176.29	29.93
19	652.95	91.97	34.69	78.24	152.93	26.27
20	553.21	84.09	30.45	65.86	129.51	22.60
21	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00
32	0.00	0.00	0.00	0.00	0.00	0.00
33	0.00	0.00	0.00	0.00	0.00	0.00
34	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00
36	0.00	0.00	0.00	0.00	0.00	0.00
37	0.00	0.00	0.00	0.00	0.00	0.00
38	0.00	0.00	0.00	0.00	0.00	0.00
39	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00
	20,741	**2,226**	**983**	**2,533**	**4,864**	**796**

	Emission Factors per Well					
	NOx	PM10	PM2.5	SO2	CO	VOCs
Op	0.028005	0.022943	0.004753	0.002043	0.006390	0.002186
Con	11.738684	1.032434	0.516984	1.449514	2.754828	0.437738

A.2.5 Emission Points Alt H Rev O&G

Reasonably Foreseeable Development Conventional Oil and Natural Gas Construction Emissions												
						Construction Emissions per Point (tons)						
Longitude	Latitude	Watershed	County	FieldName	Number of RFD Predicted Conventional O&G Wells/Point	NOx	PM10	PM2.5	SO2	CO	VOCs
-109.0236412	45.05437447	CLARKS FORK YELLOWSTONE	Carbon	Clarks Fork, North	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.9918606	45.02923114	CLARKS FORK YELLOWSTONE	Carbon	Clarks Fork, South	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.1664629	45.25069265	CLARKS FORK YELLOWSTONE	Carbon	DRY CREEK, SOUTHWEST	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.0660754	45.23437027	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.1394904	45.24439577	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek (Shallow Gas)	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.1101088	45.22432772	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek Middle	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.1657489	45.26489048	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek, West	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.925496	45.02211351	CLARKS FORK YELLOWSTONE	Carbon	Elk Basin, Northwest	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.0158689	45.23016862	CLARKS FORK YELLOWSTONE	Carbon	Golden Dome	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.738091	45.64218707	CLARKS FORK YELLOWSTONE	Yellowstone	Laurel	15	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.7303675	45.54598467	CLARKS FORK YELLOWSTONE	Yellowstone	Mosser Dome	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.1446442	45.08461797	LITTLE POWDER	Powder River	Bell Creek	130	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.0520866	45.0792822	LITTLE POWDER	Powder River	Bell Creek, Southeast	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.4394337	45.09008461	LITTLE POWDER	Powder River	Leary	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.2378378	45.15741562	LITTLE POWDER	Powder River	Wright Creek	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.4510648	45.78622887	LOWER BIGHORN	Big Horn	Snyder	6	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.7873613	45.73369099	LOWER BIGHORN	Big Horn	Toluca	50	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-106.1305727	45.84581762	LOWER TONGUE	Custer	Liscom Creek	45	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.637355	45.76245346	LOWER TONGUE	Powder River	Pumpkin Creek	155	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.7586412	46.35583022	LOWER YELLOWSTONE-SUNDAY	Yellowstone	Wolf Springs	5	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.6824339	46.31220043	LOWER YELLOWSTONE-SUNDAY	Yellowstone	Wolf Springs, South	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.3884717	46.62018932	MIDDLE MUSSELSHELL	Musselshell	Big Wall	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.6668238	46.7078922	MIDDLE MUSSELSHELL	Musselshell	Devils Basin	60	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.4307331	46.5395143	MIDDLE MUSSELSHELL	Musselshell	Gage	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.8392603	46.71520303	MIDDLE MUSSELSHELL	Musselshell	Ivanhoe	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.8830078	46.67482682	MIDDLE MUSSELSHELL	Musselshell	Keg Coulee	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.8849894	46.70171261	MIDDLE MUSSELSHELL	Musselshell	Keg Coulee, North	5	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.1341406	46.63949319	MIDDLE MUSSELSHELL	Musselshell	Kelley	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.6896771	46.50133186	MIDDLE MUSSELSHELL	Musselshell	Mason Lake	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.9789922	46.74257344	MIDDLE MUSSELSHELL	Musselshell	Ragged Point	40	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.7902265	46.73318214	MIDDLE MUSSELSHELL	Rosebud	Stensvad	100	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.601424	46.73368525	MIDDLE MUSSELSHELL	Musselshell	Winnett Junction	5	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.6877601	46.71062636	MIDDLE MUSSELSHELL	Rosebud	Sumatra	195	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.6007701	45.79967713	MIZPAH	Custer	Pumpkin Creek	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.5292415	45.26096039	STILLWATER	Carbon	Butcher Creek	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-105.0563446	45.05516191	UPPER LITTLE MISSOURI	Powder River	Bell Creek, Southeast	5	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-104.6836791	45.14149049	UPPER LITTLE MISSOURI	Carter	Hammond	85	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.9435369	46.1442151	UPPER MUSSELSHELL	Golden Valley	Broadview	2	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.020649	46.6573022	UPPER MUSSELSHELL	Golden Valley	Devils Pocket	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.5422607	46.29282688	UPPER MUSSELSHELL	Wheatland	Mud Creek	15	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-106.8666782	45.01278441	UPPER TONGUE	Big Horn	CX	60	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-106.7595891	45.15616455	UPPER TONGUE	Big Horn	Coal Creek	5	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569

Reasonably Foreseeable Development Conventional Oil and Natural Gas Construction Emissions

						Construction Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	FieldName	Number of RFD Predicted Conventional O&G Wells/Point	NOx	PM10	PM2.5	SO2	CO	VOCs
-106.633869	45.03290808	UPPER TONGUE	Big Horn	Wildcat Big Horn	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.2612885	46.06628384	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Big Coulee	5	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.0954149	45.82189619	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Lake Basin	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.109527	45.91998552	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Lake Basin, North	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.7105889	45.66226315	UPPER YELLOWSTONE-LAKE BASIN	Yellowstone	Laurel	15	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.0930362	45.99049997	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Little Basin	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.2405161	45.94602747	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Rapelje	25	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-109.4389013	46.00911669	UPPER YELLOWSTONE-LAKE BASIN	Sweet Grass	Sixshooter Dome	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-108.9355865	46.13731994	UPPER YELLOWSTONE-POMPEYS PIL	Golden Valley	Broadview	3	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.9202114	45.73742245	UPPER YELLOWSTONE-POMPEYS PIL	Big Horn	Toluca	19	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.752724	46.34044445	UPPER YELLOWSTONE-POMPEYS PIL	Yellowstone	Wolf Springs	10	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
-107.7054586	46.30492103	UPPER YELLOWSTONE-POMPEYS PIL	Yellowstone	Wolf Springs, South	20	9.347471	0.822124	0.411672	1.154242	2.193659	0.348569
					1730						

Reasonably Foreseeable Development Conventional Oil and Natural Gas Operational Emissions											
						Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	FieldName	Number of RFD Predicted Conventional O&G Wells/Point	NOx	PM10	PM2.5	SO2	CO	VOCs
-109.0236412	45.05437447	CLARKS FORK YELLOWSTONE	Carbon	Clarks Fork, North	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642
-108.9918606	45.02923114	CLARKS FORK YELLOWSTONE	Carbon	Clarks Fork, South	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642
-109.1664629	45.25069265	CLARKS FORK YELLOWSTONE	Carbon	DRY CREEK, SOUTHWEST	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-109.0660754	45.23437027	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-109.1394904	45.24439577	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek (Shallow Gas)	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-109.1101088	45.22432772	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek Middle	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-109.1657489	45.26489048	CLARKS FORK YELLOWSTONE	Carbon	Dry Creek, West	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-108.925496	45.02211351	CLARKS FORK YELLOWSTONE	Carbon	Elk Basin, Northwest	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-109.0158689	45.23016862	CLARKS FORK YELLOWSTONE	Carbon	Golden Dome	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-108.738091	45.64218707	CLARKS FORK YELLOWSTONE	Yellowstone	Laurel	15	0.420071	0.34415	0.071299	0.030647	0.095855	0.032785
-108.7303675	45.54598467	CLARKS FORK YELLOWSTONE	Yellowstone	Mosser Dome	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-105.1446442	45.08461797	LITTLE POWDER	Powder River	Bell Creek	130	3.640618	2.982634	0.617922	0.265606	0.830745	0.284136
-105.0520866	45.0792822	LITTLE POWDER	Powder River	Bell Creek, Southeast	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-105.4394337	45.09008461	LITTLE POWDER	Powder River	Leary	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-105.2378378	45.15741562	LITTLE POWDER	Powder River	Wright Creek	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-107.4510648	45.78622887	LOWER BIGHORN	Big Horn	Snyder	6	0.168029	0.13766	0.028519	0.012259	0.038342	0.013114
-107.7873613	45.73369099	LOWER BIGHORN	Big Horn	Toluca	50	1.400238	1.147167	0.237662	0.102156	0.319517	0.109283
-106.1305727	45.84581762	LOWER TONGUE	Custer	Liscom Creek	45	1.260214	1.03245	0.213896	0.09194	0.287565	0.098355
-105.637355	45.76245346	LOWER TONGUE	Powder River	Pumpkin Creek	155	4.340736	3.556217	0.736753	0.316684	0.990503	0.338778
-107.7586412	46.35583022	LOWER YELLOWSTONE-SUNDAY	Yellowstone	Wolf Springs	5	0.140024	0.114717	0.023766	0.010216	0.031952	0.010928
-107.6824339	46.31220043	LOWER YELLOWSTONE-SUNDAY	Yellowstone	Wolf Springs, South	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642
-108.3884717	46.62018932	MIDDLE MUSSELSHELL	Musselshell	Big Wall	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-108.6668238	46.7078922	MIDDLE MUSSELSHELL	Musselshell	Devils Basin	60	1.680285	1.3766	0.285195	0.122587	0.383421	0.13114
-108.4307331	46.5395143	MIDDLE MUSSELSHELL	Musselshell	Gage	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-107.8392603	46.71520303	MIDDLE MUSSELSHELL	Musselshell	Ivanhoe	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-107.8830078	46.67482682	MIDDLE MUSSELSHELL	Musselshell	Keg Coulee	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-107.8849894	46.70171261	MIDDLE MUSSELSHELL	Musselshell	Keg Coulee, North	5	0.140024	0.114717	0.023766	0.010216	0.031952	0.010928
-108.1341406	46.63949319	MIDDLE MUSSELSHELL	Musselshell	Kelley	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-108.6896771	46.50133186	MIDDLE MUSSELSHELL	Musselshell	Mason Lake	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-107.9789922	46.74257344	MIDDLE MUSSELSHELL	Musselshell	Ragged Point	40	1.12019	0.917733	0.19013	0.081725	0.255614	0.087426
-107.7902265	46.73318214	MIDDLE MUSSELSHELL	Rosebud	Stensvad	100	2.800475	2.294334	0.475325	0.204312	0.639034	0.218566
-108.601424	46.73368525	MIDDLE MUSSELSHELL	Musselshell	Winnett Junction	5	0.140024	0.114717	0.023766	0.010216	0.031952	0.010928
-107.6877601	46.71062636	MIDDLE MUSSELSHELL	Rosebud	Sumatra	195	5.460926	4.473951	0.926883	0.398409	1.246117	0.426204
-105.6007701	45.79967713	MIZPAH	Custer	Pumpkin Creek	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-109.5292415	45.26096039	STILLWATER	Carbon	Butcher Creek	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-105.0563446	45.05516191	UPPER LITTLE MISSOURI	Powder River	Bell Creek, Southeast	5	0.140024	0.114717	0.023766	0.010216	0.031952	0.010928
-104.6836791	45.14149049	UPPER LITTLE MISSOURI	Carter	Hammond	85	2.380404	1.950184	0.404026	0.173665	0.543179	0.185781
-108.9435369	46.1442151	UPPER MUSSELSHELL	Golden Valley	Broadview	2	0.05601	0.045887	0.009506	0.004086	0.012781	0.004371
-109.020649	46.6573022	UPPER MUSSELSHELL	Golden Valley	Devils Pocket	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642
-109.5422607	46.29282688	UPPER MUSSELSHELL	Wheatland	Mud Creek	15	0.420071	0.34415	0.071299	0.030647	0.095855	0.032785
-106.8666782	45.01278441	UPPER TONGUE	Big Horn	CX	60	1.680285	1.3766	0.285195	0.122587	0.383421	0.13114
-106.7595891	45.15616455	UPPER TONGUE	Big Horn	Coal Creek	5	0.140024	0.114717	0.023766	0.010216	0.031952	0.010928
-106.633869	45.03290808	UPPER TONGUE	Big Horn	Wildcat Big Horn	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-109.2612885	46.06628384	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Big Coulee	5	0.140024	0.114717	0.023766	0.010216	0.031952	0.010928
-109.0954149	45.82189619	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Lake Basin	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642

Reasonably Foreseeable Development Conventional Oil and Natural Gas Operational Emissions											
						Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	FieldName	Number of RFD Predicted Conventional O&G Wells/Point	NOx	PM10	PM2.5	SO2	CO	VOCs
-109.109527	45.91998552	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Lake Basin, North	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642
-108.7105889	45.66226315	UPPER YELLOWSTONE-LAKE BASIN	Yellowstone	Laurel	15	0.420071	0.34415	0.071299	0.030647	0.095855	0.032785
-109.0930362	45.99049997	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Little Basin	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-109.2405161	45.94602747	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	Rapelje	25	0.700119	0.573583	0.118831	0.051078	0.159759	0.054642
-109.4389013	46.00911669	UPPER YELLOWSTONE-LAKE BASIN	Sweet Grass	Sixshooter Dome	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
-108.9355865	46.13731994	UPPER YELLOWSTONE-POMPEYS PILLAR	Golden Valley	Broadview	3	0.084014	0.06883	0.01426	0.006129	0.019171	0.006557
-107.9202114	45.73742245	UPPER YELLOWSTONE-POMPEYS PILLAR	Big Horn	Toluca	19	0.53209	0.435923	0.090312	0.038819	0.121417	0.041528
-107.752724	46.34044445	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	Wolf Springs	10	0.280048	0.229433	0.047532	0.020431	0.063903	0.021857
-107.7054586	46.30492103	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	Wolf Springs, South	20	0.560095	0.458867	0.095065	0.040862	0.127807	0.043713
					1730						

A.3.1 Construction Emission Calculations for the Montana CBNG Project Activities - Scenario 1

Heavy Equipment

Fugitive Dust Emissions

Emission Factors for Construction Activities

				Reference
E	=	1.2 Tons of TSP/acre/month		EPA, AP-42, Volume I, Section 13.2.3 Heavy Construction Operations (1/95)
PM10	=	26 % of TSP		Argonne National Laboratory - 2002 TSD
PM2.5	=	15 % of PM10		Argonne National Laboratory - 2002 TSD
CE	=	50 %	Control Efficiency for watering	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emission Calculations for Construction Activities

Area Disturbed for CBNG Wells	Emission Estimation Basis	Disturbed Area (acre)	Avg. # of Days to Complete	Total # of Well Pads or Stations	Total Disturbed Area	Emissions (lb/well pad, lb/stn, or lb/project)			Emissions (ton/project)		
						TSP	PM10	PM2.5	TSP	PM10	PM2.5
Road	per Well Pad	0.75	3	6,075	4,556	90	23	4	273	71	11
Well Pad	per Well Pad	0.25	3	6,075	1,519	30	8	1	91	24	4
Gathering Poly Pipeline (Low Pressure)	per Well Pad	1.5	1	6,075	9,113	60	16	2	182	47	7
Steel Pipeline (Low/IntermediatePressure)	per Field Station	6.06	1	673	4,078	242	63	9	82	21	3
Sales Pipeline, 36" D x 600 miles	per Project		1		1,316	52,640	13,686	2,053	26	7	1
Electric Line	per Well Pad	0.35	1	6,075	2,126	14	4	1	43	11	2
Field Compressor Station	per Field Station	2	5	404	808	400	104	16	81	21	3
Sales Compressor Station	per Sales Station	1	5	81	81	200	52	8	8	2	0
Impoundment	per Impoundment	6	5	356	2,136	1,200	312	47	214	56	8
				Total	25,733				1,000	260	39

Exhaust Emissions

Emission Factors for Construction Equipment EPA, AP-42, Volume II, Section 11-7 Heavy-Duty Construction Equipment (9/85)

Equipment	Emission Factors (g/hp-hr)					Equipment Category in AP-42
	NOx	PM10	SO2	CO	VOCs	
Backhoe	8.81	0.81	0.86	2.71	0.97	Wheeled Loader
Dozer	7.81	0.69	0.85	2.15	0.75	Track-type Tractor
Blade	7.14	0.63	0.87	1.54	0.36	Motor Grader
Trencher	11.01	0.90	0.93	4.60	1.01	Miscellaneous
Trackhoe	9.30	0.66	0.85	2.26	1.11	Track-type Tractor

Emissions Estimation for Construction Equipment

Construction Site	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well Pad or per Station	# of Operating Hours per Well Pad or per Station	# of Well Pads or Stations	Emissions (lb/well pad, lb/stn, or lb/project)					Emissions (ton/equipment type)					Emissions (ton/construction site)				
									NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Road	Blade	100	1	80	10	0.2	2	6,075	3	0.2	0.3	0.5	0.1	8	1	1	2	0					
	Backhoe	80	1	75	10	0.1	1	6,075	1.2	0.1	0.1	0.4	0.1	4	0	0	1	0	11	1	1	3	1
Well Pad	Backhoe	80	1	75	10	0.5	5	6,075	6	0.5	0.6	2	0.6	18	2	2	5	2	18	2	2	5	2
Gathering Poly Pipeline (Low Pressure)	Blade	100	1	80	10	0.25	2.5	6,075	3	0.3	0.4	0.7	0.2	10	1	1	2	0					
	Trencher	175	1	80	10	1	10	6,075	34	3	3	14	3	103	8	9	43	9					
	Backhoe	80	1	75	10	0.25	2.5	6,075	3	0.3	0.3	0.9	0.3	9	1	1	3	1	122	10	11	48	11
Steel Pipeline (Low/Intermediate Pressure)	Blade	100	1	80	10	5	50	404	63	5.6	7.7	13.6	3.2	13	1	2	3	1					
	Trencher	175	1	80	10	5	50	404	170	13.9	14.4	71.0	15.6	34	3	3	14	3					
	Trackhoe	75	1	75	10	10	100	404	115	8.2	10.5	28.0	13.8	23	2	2	6	3	70	6	7	23	7
Steel Pipeline (Sales)	Blade	100	1	80	10	43.4	434.3	1	547	48	67	118	28	0.27	0.02	0.03	0.06	0.01					
	Trencher	175	1	80	10	43.4	434.3	1	1,476	121	125	617	135	0.74	0.06	0.06	0.31	0.07					
	Trackhoe	75	1	75	10	65.1	651.4	1	751	53	69	183	90	0.38	0.03	0.03	0.09	0.04	1.39	0.11	0.13	0.46	0.13
Field Compressor Station	Dozer	350	1	80	8	2	16	404	77	7	8	21	7	15.6	1.4	1.7	4.3	1.5					
	Backhoe	80	2	80	8	3	24	404	60	5	6	18	7	12.1	1.1	1.2	3.7	1.3	27.6	2.5	2.9	8.0	2.8
Sales Compressor Station	Dozer	350	1	80	8	2	16	81	77	7	8	21	7	3.1	0.3	0.3	0.9	0.3					
	Backhoe	80	2	80	8	3	24	81	60	5	6	18	7	2.4	0.2	0.2	0.7	0.3	5.5	0.5	0.6	1.6	0.6
Impoundment	Dozer	350	1	80	8	0.4	3.2	356	15	1	2	4	1	2.7	0.2	0.3	0.8	0.3					
	Blade	100	1	80	8	0.4	3.2	356	4	0	0	1	0	0.7	0.1	0.1	0.2	0.0	3.5	0.3	0.4	0.9	0.3
													Subtotal:	**259**	**22**	**24**	**90**	**24**	**259**	**22**	**24**	**90**	**24**

Emission Factors for Industrial Engines

Emission Source	Fuel Type	Emission Factors					
		Unit	NOx	PM10	SOx	CO	VOCs
Industrial Engine	Diesel	lb/hp-hr	3.10E-02	2.20E-03	2.05E-03	6.68E-03	2.51E-03
Flaring	Natural Gas	lb/MMCF	69	7.6	0.6	377	64

EPA, AP-42, Volume I, Section 3.3 Gasoline and Industrial Engines
EPA, AP-42, Volume I, Section 13.5 Industrial Flares & Section 1.4 Natural Gas Combustion

Emissions Estimation for Industrial Engines

Construction Site Activity	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well	# of Operating Hours per Well	# of Wells	Emissions (lb/well)					Emissions (ton/equipment type)					Emissions (ton/project activity)				
									NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Main Deck	400	1	60	11	3	33	18,225	246	17	16	53	20	2,237	159	148	482	181	3,254	231	215	701	263
	Auxillary Pump	200	1	90	10	2	20	18,225	112	8	7	24	9	1,017	72	67	219	82					
Well Completion & Testing	Main Deck	400	1	60	10	1	10	18,225	74	5	5	16	6	678	48	45	146	55	13,716	975	905	3,154	1,143
	Auxillary Pump	125	1	90	6	1	6	18,225	21	1	1	5	2	191	14	13	41	15					
	Equipment Type	**Capacity (kw)**	**Avg # of Wells Served**	**Avg. Load Factor (%)**	**# of Operating Hours per Day**	**Avg. # of Operating Days**	**# of Operating Hours per Well**	**# of Wells**															
	Field Generators for Pumps & Lighting	125	8	75	24	120	360	18,225	1403	100	93	302	114	12,810	909	847	2,760	1,037					
	Emission Source	**Average Volume Flared (MCFD/well)**			**Average # Days of Continuous Flaring**			**# of Wells**															
	Flaring of Natural Gas	60			1			18,225	4	0.5	0.0	23	4	38	4	0	207	35					
													Subtotal:	**16,971**	**1,206**	**1,120**	**3,855**	**1,406**	**16,971**	**1,206**	**1,120**	**3,855**	**1,406**
													Total:	**17,229**	**1,228**	**1,144**	**3,945**	**1,430**	**17,229**	**1,228**	**1,144**	**3,945**	**1,430**

PM2.5 is assumed to be same as PM10

Commuting Vehicles

Road Dust Emissions

Emission Factors for Road Traffic

$$E\ (lb/VMT) = \frac{k\,(s/12)^a\,(W/3)^b}{(M/0.2)^c}$$

Parameter	PM10	PM2.5
k	2.6	0.38
a	0.8	0.8
b	0.4	0.4
c	0.3	0.3

Source: EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)

Function/Variable Description	Assumed Value	Reference
E = size-specific emission factor (lb/VMT)		
s = surface material silt content (%)	5.1	EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
W = mean vehicle weight (tons)	listed in table below	
M = surface material moisture content (%)	0.2	Default value in EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
CE = control efficiency for watering (%)	50	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emissions Estimation for Road Traffic

Construction Site Destination	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Road	Semi Trucks	60,000	6	2.6	16	6,075	1.65	26	78	78	0.24	4	11	11
Well Pad	Haul Trucks	45,000	6	2	12	6,075	1.47	18	54		0.21	3	8	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	79	0.10	1	4	12
Poly Pipeline, < 3"	Haul Trucks	45,000	6	4	24	6,075	1.47	35	107		0.21	5	16	
	Pickup Trucks	7,000	6	4	24	6,075	0.70	17	51	158	0.10	2	7	23
Steel Pipeline	Semi Trucks	60,000	6	4	24	404	1.65	40	8		0.24	6	1	
	Haul Trucks	45,000	6	40	240	404	1.47	352	71		0.21	51	10	
	Pickup Trucks	7,000	6	160	960	404	0.70	669	135	214	0.10	98	20	31
Sales Pipeline, 36" D, 600 mi	Semi Trucks	60,000	35	94	3,290	1	1.65	5418	3		0.24	792	0	
	Haul Trucks	45,000	35	94	3,290	1	1.47	4829	2		0.21	706	0	
	Pickup Trucks	7,000	50	94	4,700	1	0.70	3277	2	7	0.10	479	0	1
Electric Line	Haul Trucks	45,000	6	1	6	6,075	1.47	9	27		0.21	1	4	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	52	0.10	1	4	8
Field Compressor Station	Semi Trucks	60,000	10	15	150	404	1.65	247	50		0.24	36	7	
	Haul Trucks	45,000	10	48	480	404	1.47	705	142		0.21	103	21	
	Pickup Trucks	7,000	10	192	1,920	404	0.70	1339	270	463	0.10	196	40	68
Sales Compressor Station	Semi Trucks	60,000	10	18.5	185	81	1.65	305	12		0.24	45	2	
	Haul Trucks	45,000	10	48	480	81	1.47	705	29		0.21	103	4	
	Pickup Trucks	7,000	10	192	1,920	81	0.70	1339	54	95	0.10	196	8	14
Impoundment	Semi Trucks	60,000	6	0.02	0.12	356	1.65	0	0		0.24	0	0	
	Haul Trucks	45,000	6	0.02	0.12	356	1.47	0	0		0.21	0	0	
	Pickup Trucks	7,000	6	0.02	0.12	356	0.70	0	0	0	0.10	0	0	0
								Subtotal:	**1,146**	**1,146**			**167**	**167**

Emissions Estimation for Road Traffic Continued

Construction Site Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions			Controlled Em. Factor (lb/VMT)	Emissions		
								(lb/well)	(ton/veh. type)	(ton/proj. activity)		(lb/well)	(ton/veh. type)	(ton/const. site)
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	80,000	6	1	6	18,225	1.85	11	101	1,587	0.27	2	15	232
	Fuel Haul Truck	45,000	6	2	12	18,225	1.47	18	161		0.21	3	23	
	Mud Haul Truck, Water Hauling	60,000	6	7	42	18,225	1.65	69	630		0.24	10	92	
	Rig Crew	7,000	6	3	18	18,225	0.70	13	114		0.10	2	17	
	Co. Supervisor	7,000	6	8	48	18,225	0.70	33	305		0.10	5	45	
	Tool Pusher	7,000	6	6	36	18,225	0.70	25	229		0.10	4	33	
	Logger, Engr. Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
Well Completion & Testing	Semi Casing	45,000	6	1	6	18,225	1.47	9	80	1,663	0.21	1	12	243
	Semi Completion, Unit Rig	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Tubing Truck	45,000	6	1	6	18,225	1.47	9	80		0.21	1	12	
	Haul Cementer, Pump Truck	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Haul Cementer, Cement Truck	60,000	6	1	6	18,225	1.65	10	90		0.24	1	13	
	Haul Completion, Equip. Truck	20,000	6	1	6	18,225	1.06	6	58		0.16	1	8	
	Haul Preforators, Logging Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Welders	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Water Truck	60,000	6	9	54	18,225	1.65	89	810		0.24	13	118	
	Pickup Cementor, Engineer	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Co. Supervisor	7,000	6	2	12	18,225	0.70	8	76		0.10	1	11	
	Pickup Miscellaneous Supplies	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Roustabout Crew	12,000	6	2	12	18,225	0.87	10	95		0.13	2	14	
								Subtotal:	3,250	3,250			475	475
								Total:	4,396	4,396			642	642

Exhaust Emissions

Vehicle		Emission Factors (g/mi)					
Type	Class	NOx	PM10	PM2.5	SO2	CO	VOCs
Light-Duty Gasoline Truck	LDGT2	1.01	0.10	0.08	0.11	11.64	0.75
Heavy-Duty Diesel Truck	HDDV	8.13	1.96	1.81	1.63	17.09	4.83

PM10 and PM2.5 were estimated using the EPA PARTS model (1995) and include tire and break wear emissions.

Source: EPA, AP-42, Volume II, Appendix H-117, Table 3.1A.2 Light-Duty Gasoline Powered Trucks and
Appendix H-259, Table 7.1.2 Heavy-Duty Diesel Powered Vehicles (High Altitude; Model Year 1991-1997; 50,000 mileage) (6/30/95)

Emissions Estimation for Road Traffic Exhaust

Construction Site Destination	Vehicle		Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	Emissions																	
							(lb/well pad, lb/station, or lb/project)						(ton/equipment type)						(ton/construction site)					
	Type	Class					NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Road	Semi Trucks	HDDV	6	2.6	16	6,075	0.28	0.07	0.06	0.06	0.59	0.17	0.8	0.2	0.2	0.2	1.8	0.5	0.8	0.2	0.2	0.2	1.8	0.5
Well Pad	Haul Trucks	HDDV	6	2	12	6,075	0.22	0.05	0.05	0.04	0.45	0.13	0.7	0.2	0.1	0.1	1.4	0.4	0.7	0.2	0.2	0.1	2.3	0.4
	Pickup Trucks	LDGT2	6	2	12	6,075	0.03	0.00	0.00	0.00	0.31	0.02	0.1	0.0	0.0	0.0	0.9	0.1						
Poly Pipeline, < 3"	Haul Trucks	HDDV	6	4	24	6,075	0.43	0.10	0.10	0.09	0.90	0.26	1.3	0.3	0.3	0.3	2.7	0.8	1.5	0.3	0.3	0.3	4.6	0.9
	Pickup Trucks	LDGT2	6	4	24	6,075	0.05	0.01	0.00	0.01	0.62	0.04	0.2	0.0	0.0	0.0	1.9	0.1						
Steel Pipeline	Semi Trucks	HDDV	6	4	24	404	0.43	0.10	0.10	0.09	0.90	0.26	0.1	0.0	0.0	0.0	0.2	0.1	1.4	0.3	0.2	0.2	7.0	0.9
	Haul Trucks	HDDV	6	40	240	404	4.30	1.04	0.96	0.86	9.04	2.56	0.9	0.2	0.2	0.2	1.8	0.5						
	Pickup Trucks	LDGT2	6	160	960	404	2.14	0.21	0.17	0.23	24.64	1.59	0.4	0.0	0.0	0.0	5.0	0.3						
Sales Pipeline, 36" D, 600 mi	Semi Trucks	HDDV	35	94	3,293		59.02	14.23	13.14	11.83	124.07	35.06	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
	Haul Trucks	HDDV	35	94	3,293		59.02	14.23	13.14	11.83	124.07	35.06	0.0	0.0	0.0	0.0	0.0	0.0						
	Pickup Trucks	LDGT2	50	94	4,700		10.47	1.04	0.83	1.14	120.61	7.77	0.0	0.0	0.0	0.0	0.0	0.0						
Electric Line	Haul Trucks	HDDV	6	1	6	6,075	0.11	0.03	0.02	0.02	0.23	0.06	0.3	0.1	0.1	0.1	0.7	0.2	0.4	0.1	0.1	0.1	1.6	0.3
	Pickup Trucks	LDGT2	6	2	12	6,075	0.03	0.00	0.00	0.00	0.31	0.02	0.1	0.0	0.0	0.0	0.9	0.1						
Field Compressor Station	Semi Trucks	HDDV	10	15	150	404	2.69	0.65	0.60	0.54	5.65	1.60	0.5	0.1	0.1	0.1	1.1	0.3	3.1	0.6	0.6	0.6	14.7	2.0
	Haul Trucks	HDDV	10	48	480	404	8.60	2.07	1.92	1.72	18.09	5.11	1.7	0.4	0.4	0.3	3.7	1.0						
	Pickup Trucks	LDGT2	10	192	1,920	404	4.28	0.42	0.34	0.47	49.27	3.17	0.9	0.1	0.1	0.1	10.0	0.6						
Sales Compressor Station	Semi Trucks	HDDV	10	18.5	185	81	3.32	0.80	0.74	0.66	6.97	1.97	0.1	0.0	0.0	0.0	0.3	0.1	0.7	0.1	0.1	0.1	3.0	0.4
	Haul Trucks	HDDV	10	48	480	81	8.60	2.07	1.92	1.72	18.09	5.11	0.3	0.1	0.1	0.1	0.7	0.2						
	Pickup Trucks	LDGT2	10	192	1,920	81	4.28	0.42	0.34	0.47	49.27	3.17	0.2	0.0	0.0	0.0	2.0	0.1						
Impoundment	Semi Trucks	HDDV	6	0.02	0.12	356	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Haul Trucks	HDDV	6	0.02	0.12	356	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0						
	Pickup Trucks	LDGT2	6	0.02	0.12	356	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0						
												Subtotal	**9**	**2**	**2**	**2**	**35**	**5**	**9**	**2**	**2**	**2**	**35**	**5**

Construction Site Activity	Vehicle		Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	Emissions																	
							(lb/well pad, lb/station, or lb/project)						(ton/equipment type)						(ton/construction site)					
	Type	Class					NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6	18.0	4.1	3.8	3.5	50.5	10.9
	Fuel Haul Truck	HDDV	6	2	12	18,225	0.22	0.05	0.05	0.04	0.45	0.13	2.0	0.5	0.4	0.4	4.1	1.2						
	Mud Haul Truck, Water Hauling	HDDV	6	7	42	18,225	0.75	0.18	0.17	0.15	1.58	0.45	6.9	1.7	1.5	1.4	14.4	4.1						
	Rig Crew	LDGT2	6	3	18	18,225	0.04	0.00	0.00	0.00	0.46	0.03	0.4	0.0	0.0	0.0	4.2	0.3						
	Co. Supervisor	LDGT2	6	8	48	18,225	0.11	0.01	0.01	0.01	1.23	0.08	1.0	0.1	0.1	0.1	11.2	0.7						
	Tool Pusher	HDDV	6	6	36	18,225	0.65	0.16	0.14	0.13	1.36	0.38	5.9	1.4	1.3	1.2	12.4	3.5						
	Logger, Engr. Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
Well Completion & Testing	Semi Casing	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6	20.1	4.8	4.4	4.0	46.8	12.0
	Semi Completion, Unit Rig	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Tubing Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Cementer, Pump Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Cementer, Cement Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Completion, Equip. Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Preforators, Logging Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Welders	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Water Truck	HDDV	6	10	60	18,225	1.08	0.26	0.24	0.22	2.26	0.64	9.8	2.4	2.2	2.0	20.6	5.8						
	Pickup Cementor, Engineer	LDGT2	6	1	6	18,225	0.01	0.00	0.00	0.00	0.15	0.01	0.1	0.0	0.0	0.0	1.4	0.1						
	Pickup Co. Supervisor	LDGT2	6	2	12	18,225	0.03	0.00	0.00	0.00	0.31	0.02	0.2	0.0	0.0	0.0	2.8	0.2						
	Pickup Miscellaneous Supplies	LDGT2	6	1	6	18,225	0.01	0.00	0.00	0.00	0.15	0.01	0.1	0.0	0.0	0.0	1.4	0.1						
	Pickup Roustabout Crew	HDDV	6	2	12	18,225	0.22	0.05	0.05	0.04	0.45	0.13	2.0	0.5	0.4	0.4	4.1	1.2						
												Subtotal:	**38**	**9**	**8**	**7**	**97**	**23**	**38**	**9**	**8**	**7**	**97**	**23**
												Total:	**47**	**11**	**10**	**9**	**132**	**28**	**47**	**11**	**10**	**9**	**133**	**28**

A.3.2 Emission Calculations for the Montana CBNG Project Operational Activities - Scenario 1

Compressors – Natural Gas Fired

Emission Factors for Compressors:

Compressor			Make	Model	Capacity (hp)	Emission Factors (g/hp-hr)					
						NOx	PM10	SO2	CO	VOCs	HCHO
Field	Rich Burn	50%	Caterpillar	G3408	400	1.50	6.60E-02	2.00E-03	2.00	1.00	0.05
	Lean Burn	50%	Waukesha	F18GL	400	1.50	6.60E-02	2.00E-03	1.50	0.50	0.20
Sales	Rich Burn	50%	Waukesha	7044GSI	1680	1.50	6.60E-02	2.00E-03	2.00	1.00	0.05
	Lean Burn	25%	Waukesha	7044GSI	1680	1.50	6.60E-02	2.00E-03	2.00	1.00	0.05
		25%	Waukesha	7044GSI	1680	1.50	6.60E-02	2.00E-03	2.00	1.00	0.05

Emissions Estimation for Compressors:

Type of Compressors	Total # of Operating Station-Year	Operating Hours per Year	Total Emissions (ton/project)				
			NOx	PM10	SO2	CO	VOCs
Field	4,380	8,760	25,377	1,117	34	29,606	12,688
Sales	876	8,760	21,316	938	28	28,422	14,211
		Total	**46,693**	**2,055**	**62**	**58,028**	**26,899**

Assume PM2.5 is same as PM10

Dehydrators

Emission Factors for Dehydrators

Unit	NOx	PM10	SO2	CO	VOCs
lb/MMscf	100	7.6	0.6	84	5.5
lb/MMBtu	9.80E-02	7.45E-03	5.88E-04	8.24E-02	5.39E-03

Emissions Estimations for Dehydrators

Compressor Station	Total Gas Production Rate (MMCFD-yr)	Firing Rate (Btu/hr/MMCFD)	Operating Hours per Year	Total Emissions (ton/project)				
				NOx	PM10	SO2	CO	VOCs
Sales	44,944	25,000	8,760	482	37	3	406	27

Road Dust Emissions

Emissions Estimates for Road Traffic:

Activity	Compressor Station	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Stations Visited per Day	# of Visits per Station per Year	Miles Traveled per Station per Year	Total # of Operating Station-Yr	PM10			PM2.5		
									Em. Factor (lb/VMT)	Emissions (lb/ station - yr)	Emissions (ton/ project)	Em. Factor (lb/VMT)	Emissions (lb/ station - yr)	Emissions (ton/ project)
Inspection Visits for Compressor Stations	Field	Pickup Truck	7,000	20	15	12	16	4,380	1.03	16.5	36	0.15	2.4	5
	Sales	Pickup Truck	7,000	20	15	52	69	876	1.03	71.4	31	0.15	10.4	5
										Total:	67			10

Exhaust Emissions

Activity	Compressor Station	Vehicle		Round Trip Distance (mi/day)	# of Stations Visited per Day	# of Visits per Station per Year	Miles Traveled per Station per Year	Total # of Operating Station-Yr	Emissions											
		Type	Class						(lb/station-yr)						(ton/project)					
									NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Inspection Visits for Compressor Stations	Field	Pickup Truck	LDGT2	20	15	12	16	4,380	0.04	0.00	0.00	0.00	0.41	0.03	0.1	0.0	0.0	0.0	0.9	0.1
	Sales	Pickup Truck	LDGT2	20	15	52	69	876	0.15	0.02	0.01	0.02	1.78	0.11	0.1	0.0	0.0	0.0	0.8	0.1
														Totals:	0.1	0.0	0.0	0.0	1.7	0.1

Well Workover

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	PM10 Emissions			PM2.5 Emissions		
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well)	Emissions (ton/project)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well)	Emissions (ton/project)
Well Workover	Bobtail Truck	40,000	50	1	50	18,225	2.06	103	939	0.30	15	138

Exhaust Emissions – On-site

Emissions Estimation for Industrial Engines:

Activity	Equipment	Capacity (hp)	Operating Hours per Day	Total # of Wells Drilled	Emissions (lb/well)					Emissions (ton/project)				
					NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Well Workover	Truck-Mounted Unit	400	10	18,225	124	9	8	27	10	1,130	80	75	243	91

Exhaust Emissions – On-site

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	Emissions (lb/station-yr)						Emissions (ton/project)					
	Type	Class					NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Well Workover	Bobtail Truck	HDDV	50	1	50	18,225	0.9	0.2	0.2	0.2	1.9	0.5	8	2	2	2	17	5

Well and Pipeline Visits for Inspection and Repair

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	PM10 Emissions			PM2.5 Emissions		
								Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
									(lb/well)	(ton/project)		(lb/well)	(ton/project)
Visits for Inspection and Repair	200-hp Pickup	7,000	75	120	12	7.5	175,181	1.03	7.7	677	0.15	1.1	99

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	Emissions											
								(lb/station-yr)						(ton/project)					
	Type	Class						NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Visits for Inspection and Repair	200-hp Pickup	LDGT2	75	120	12	7.5	175,181	0.017	0.002	0.001	0.002	0.192	0.012	1.5	0.1	0.1	0.2	16.9	1.1

A.3.3 Emission Calculations for the Montana CBNG Project Maintenance Activities - Scenario 1

Road Maintenance

Given Data:

Maintenance	Equipment/Vehicle			Road Length Worked On per Day (mi)	# of Operating Hours per Day
	Type	Fuel	Capacity (hp)		
Summer	Heavy Equipment	Diesel	135	6	10
	Commuting Vehicle	Gasoline	225	6	1
Winter	Heavy Equipment	Diesel	135	5	10
	Commuting Vehicle	Gasoline	225	6	1.5

Estimation of Total and Cumulative Length of Roads:

Total Length of Roads to be Built (mi)	6,224
Cummulative Length of Roads Maintained (mi-yr)	59,826

Estimation of Total Operation Days and Hours:

Season	# of Operation per Year	Cummulative Length of Roads (mi-yr)	Road Length Worked On (mi/day)	# of Operating Hours per Day	Total # of Operating Days	Total # of Operating Hours
Summer	2	59,826	6	10	19,942	199,420
Winter	1	59,826	5	10	11,965	119,652
				Totals:	31,907	319,071

Fugitive Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	PM10		PM2.5	
						Em. Factor (lb/VMT)	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/project)
Road Maintenance	Pickup Truck	7,000	6	31,907	191,443	1.03	99	0.15	14

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	Emissions (ton/project)					
	Type	Class				NOx	PM10	PM2.5	SO2	CO	VOCs
Road Maintenance	Pickup Truck	LDGT2	6	31,907	191,443	0.21	0.02	0.02	0.02	2.46	0.16

Maintenance Visits to Compressor Stations
Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight	Compressor Station	# of Stations	Cummulative # of Station-Yr	# of Visits per Year	Total # of Round Trips	Round Trip Distance	Total Miles Traveled	PM10		PM2.5	
										Em. Factor	Emissions (ton/project)	Em. Factor	Emissions (ton/project)
Maintenance Visits to Compressor Stations	Pickup Truck	7,000	Field	673	4,380	2	8,760	20	175,209	1.03	90	0.15	13
	Pickup Truck	7,000	Sales	67	876	2	1,752	20	35,042	1.03	18	0.15	3
										Totals:	108		16

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight	Compressor Station	# of Stations	Cummulative # of Station-Yr	# of Visits per Year	Total # of Round Trips	Round Trip Distance	Total Miles Traveled	PM10		PM2.5	
										Em. Factor	Emissions (ton/project)	Em. Factor	Emissions (ton/project)
Maintenance Visits to Compressor Stations	Pickup Truck	7,000	Field	673	4,380	2	8,760	20	175,209	1.03	90	0.15	13
	Pickup Truck	7,000	Sales	67	876	2	1,752	20	35,042	1.03	18	0.15	3
										Totals:	108		16

A.3.4 ADY 20 – Scenario 1

	Wells	Field	Sales
Ratio:	200	5	1

	Wells		Compressors					
Year	Drilled	Operating	Field	Sales	# Well Pads	# Operating Well Years	# Operating FC Years	# Operating SC Years
1	607	546	14	3	202	546	14	3
2	910	1,365	34	7	485	1,912	48	10
3	1,075	2,333	58	12	813	4,244	106	21
4	1,175	3,390	85	17	1,169	7,635	191	38
5	1,075	4,358	109	22	1,488	11,993	300	60
6	950	5,213	130	26	1,769	17,205	430	86
7	910	6,032	151	30	2,041	23,237	581	116
8	910	6,851	171	34	2,314	30,088	752	150
9	910	7,670	192	38	2,587	37,758	944	189
10	910	8,489	212	42	2,860	46,247	1,156	231
11	910	9,308	233	47	3,133	55,554	1,389	278
12	910	10,127	253	51	3,406	65,681	1,642	328
13	910	10,946	274	55	3,679	76,627	1,916	383
14	910	11,765	294	59	3,952	88,392	2,210	442
15	910	12,584	315	63	4,225	100,976	2,524	505
16	910	13,403	335	67	4,498	114,378	2,859	572
17	860	14,177	354	71	4,754	128,555	3,214	643
18	800	14,897	372	74	4,992	143,452	3,586	717
19	750	15,572	389	78	5,216	159,024	3,976	795
20	650	16,157	404	81	5,407	175,181	4,380	876
21	273	15,856	396	79	5,477	191,037	4,776	955
22	0	15,038	376	75	5,285	206,074	5,152	1,030
23	0	14,070	352	70	5,013	220,145	5,504	1,101
24	0	13,013	325	65	4,690	233,157	5,829	1,166
25	0	12,045	301	60	4,338	245,203	6,130	1,226
26	0	11,190	280	56	4,015	256,393	6,410	1,282
27	0	10,371	259	52	3,730	266,764	6,669	1,334
28	0	9,552	239	48	3,457	276,316	6,908	1,382
29	0	8,733	218	44	3,184	285,049	7,126	1,425
30	0	7,914	198	40	2,911	292,964	7,324	1,465
31	0	7,095	177	35	2,638	300,059	7,501	1,500
32	0	6,276	157	31	2,365	306,335	7,658	1,532
33	0	5,457	136	27	2,092	311,792	7,795	1,559
34	0	4,638	116	23	1,819	316,430	7,911	1,582
35	0	3,819	95	19	1,546	320,250	8,006	1,601
36	0	3,000	75	15	1,273	323,250	8,081	1,616
37	0	2,226	56	11	1,000	325,476	8,137	1,627
38	0	1,506	38	8	742	326,982	8,175	1,635
39	0	831	21	4	502	327,813	8,195	1,639
40	0	246	6	1	277	328,060	8,201	1,640
	18,225							

	Operation and Maintenance Emissions						Construction Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
1	151.29	13.87	7.80	0.52	183.23	84.30	575.39	196.30	63.91	38.40	135.82	48.56
2	378.10	34.66	19.49	1.30	457.92	210.67	862.62	294.30	95.82	57.57	203.62	72.80
3	646.04	59.23	33.30	2.22	782.42	359.96	1,019.02	347.66	113.19	68.01	240.54	86.00
4	938.90	86.08	48.39	3.22	1,137.10	523.14	1,113.82	380.00	123.72	74.34	262.92	94.00
5	1,206.83	110.64	62.20	4.14	1,461.60	672.42	1,019.02	347.66	113.19	68.01	240.54	86.00
6	1,443.62	132.35	74.40	4.95	1,748.37	804.35	900.53	307.23	100.03	60.10	212.57	76.00
7	1,670.43	153.14	86.09	5.73	2,023.06	930.73	862.62	294.30	95.82	57.57	203.62	72.80
8	1,897.24	173.94	97.78	6.51	2,297.75	1,057.10	862.62	294.30	95.82	57.57	203.62	72.80
9	2,124.05	194.73	109.47	7.29	2,572.45	1,183.48	862.62	294.30	95.82	57.57	203.62	72.80
10	2,350.86	215.53	121.16	8.07	2,847.14	1,309.85	862.62	294.30	95.82	57.57	203.62	72.80
11	2,577.67	236.32	132.85	8.85	3,121.83	1,436.23	862.62	294.30	95.82	57.57	203.62	72.80
12	2,804.48	257.11	144.54	9.63	3,396.52	1,562.60	862.62	294.30	95.82	57.57	203.62	72.80
13	3,031.29	277.91	156.23	10.40	3,671.22	1,688.98	862.62	294.30	95.82	57.57	203.62	72.80
14	3,258.10	298.70	167.92	11.18	3,945.91	1,815.35	862.62	294.30	95.82	57.57	203.62	72.80
15	3,484.92	319.50	179.61	11.96	4,220.60	1,941.73	862.62	294.30	95.82	57.57	203.62	72.80
16	3,711.73	340.29	191.29	12.74	4,495.29	2,068.10	862.62	294.30	95.82	57.57	203.62	72.80
17	3,926.08	359.94	202.34	13.48	4,754.89	2,187.53	815.22	278.13	90.55	54.41	192.43	68.80
18	4,125.47	378.22	212.62	14.16	4,996.38	2,298.63	758.34	258.72	84.24	50.61	179.01	64.00
19	4,312.40	395.36	222.25	14.80	5,222.77	2,402.79	710.95	242.55	78.97	47.45	167.82	60.00
20	4,474.41	410.21	230.60	15.36	5,418.98	2,493.06	616.15	210.21	68.44	41.12	145.44	52.00
21							258.78	88.29	28.75	17.27	61.09	21.84
22							0.00	0.00	0.00	0.00	0.00	0.00
23							0.00	0.00	0.00	0.00	0.00	0.00
24							0.00	0.00	0.00	0.00	0.00	0.00
25							0.00	0.00	0.00	0.00	0.00	0.00
26							0.00	0.00	0.00	0.00	0.00	0.00
27							0.00	0.00	0.00	0.00	0.00	0.00
28							0.00	0.00	0.00	0.00	0.00	0.00
29							0.00	0.00	0.00	0.00	0.00	0.00
30							0.00	0.00	0.00	0.00	0.00	0.00
31							0.00	0.00	0.00	0.00	0.00	0.00
32							0.00	0.00	0.00	0.00	0.00	0.00
33							0.00	0.00	0.00	0.00	0.00	0.00
34							0.00	0.00	0.00	0.00	0.00	0.00
35							0.00	0.00	0.00	0.00	0.00	0.00
36							0.00	0.00	0.00	0.00	0.00	0.00
37							0.00	0.00	0.00	0.00	0.00	0.00
38							0.00	0.00	0.00	0.00	0.00	0.00
39							0.00	0.00	0.00	0.00	0.00	0.00
40							0.00	0.00	0.00	0.00	0.00	0.00
	48,514	**4,448**	**2,500**	**167**	**58,755**	**27,031**	**17,276**	**5,894**	**1,919**	**1,153**	**4,078**	**1,458**

	Combined Construction & Operation and Maintenance Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs
1	726.68	210.18	71.71	38.92	319.05	132.86
2	1,240.72	328.96	115.30	58.87	661.54	283.47
3	1,665.06	406.89	146.49	70.23	1,022.96	445.96
4	2,052.71	466.08	172.11	77.56	1,400.02	617.14
5	2,225.86	458.30	175.39	72.15	1,702.14	758.42
6	2,344.15	439.58	174.43	65.06	1,960.94	880.35
7	2,533.04	447.44	181.91	63.30	2,226.68	1,003.53
8	2,759.85	468.23	193.60	64.08	2,501.37	1,129.90
9	2,986.66	489.03	205.29	64.86	2,776.07	1,256.28
10	3,213.47	509.82	216.98	65.64	3,050.76	1,382.65
11	3,440.29	530.62	228.67	66.42	3,325.45	1,509.03
12	3,667.10	551.41	240.36	67.20	3,600.14	1,635.40
13	3,893.91	572.20	252.05	67.98	3,874.84	1,761.78
14	4,120.72	593.00	263.73	68.75	4,149.53	1,888.15
15	4,347.53	613.79	275.42	69.53	4,424.22	2,014.53
16	4,574.34	634.59	287.11	70.31	4,698.91	2,140.90
17	4,741.29	638.07	292.90	67.88	4,947.32	2,256.33
18	4,883.81	636.94	296.85	64.77	5,175.39	2,362.63
19	5,023.35	637.91	301.22	62.25	5,390.59	2,462.79
20	5,090.56	620.43	299.04	56.48	5,564.43	2,545.06
21	258.78	88.29	28.75	17.27	61.09	21.84
22	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00
32	0.00	0.00	0.00	0.00	0.00	0.00
33	0.00	0.00	0.00	0.00	0.00	0.00
34	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00
36	0.00	0.00	0.00	0.00	0.00	0.00
37	0.00	0.00	0.00	0.00	0.00	0.00
38	0.00	0.00	0.00	0.00	0.00	0.00
39	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00
	65,790	**10,342**	**4,419**	**1,320**	**62,833**	**28,489**

	Emission Factors per Well					
	NOx	PM10	PM2.5	SO2	CO	VOCs
Op	0.276933	0.025389	0.014273	0.000951	0.335395	0.154302
Con	0.947929	0.323402	0.105295	0.063265	0.223759	0.080000

A.3.5 Emission Points - Scenario 1

Scenario 1 - SEIS RFD Emission Points by Watershed for Construction Emissions (1.5 g NOx for Engines)										
					Construction Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Construction Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.9441365	45.17350559	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-108.9547988	45.02511074	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0888964	45.29528577	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0499645	45.44325647	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5441521	45.01011264	LITTLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.4367862	45.14408638	LITTLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.6163493	46.03435575	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2566985	45.82981624	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2689192	45.9319004	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2371025	45.91155283	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2876139	45.87320735	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.3704664	45.9433915	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.3833798	45.91986854	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2206782	45.78953449	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8950719	45.32372874	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1906473	45.04845919	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.127224	45.0482058	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0662494	45.0463265	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0192953	45.08316794	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0850023	45.08521834	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.150915	45.08390454	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2145762	45.08081906	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9627608	45.12005428	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1962674	45.11191918	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1351194	45.11174049	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0714183	45.11478024	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0125111	45.11626908	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8058573	45.39278421	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.000915	45.15088418	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0575099	45.14932839	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1091992	45.15092488	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1658912	45.1476511	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2270788	45.14781278	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.957088	45.15485509	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8427057	45.47897521	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7670751	45.58143586	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7724857	45.67659425	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7939829	45.78061951	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7968544	45.87902714	LOWER TONGUE	Custer	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8384004	45.56452059	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2169993	45.59975321	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1245521	45.72872913	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1463546	45.51900756	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9185693	45.75201292	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9469395	45.84556398	LOWER TONGUE	Custer	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1199013	45.82426101	LOWER TONGUE	Custer	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1862006	45.74380863	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1732814	45.41523309	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1353247	45.7765741	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1853627	45.84829915	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1159668	45.83910419	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9493448	45.79823964	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9102423	45.80233865	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9500425	45.73349506	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1777591	45.90447616	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9564803	45.82575858	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9837523	45.77697522	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9834606	45.81344396	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9801085	45.85184712	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.0672212	45.87672105	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.985258	45.73936775	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9950453	45.7146349	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9791728	45.89239879	LOWER YELLOWSTONE-SUNDAY	Treasure	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9482033	45.76730492	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1261029	45.89324815	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714

Scenario 1 - SEIS RFD Emission Points by Watershed for Construction Emissions (1.5 g NOx for Engines)											
					Construction Emissions per Point (tons)						
Longitude	Latitude	Watershed	County	Construction Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.1869611	46.42502531	MIDDLE MUSSELSHELL	Musselshell	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1538128	45.00373939	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0026151	45.00435919	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8748974	45.01191736	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7462246	45.01080066	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6336909	45.01434879	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5669066	45.06934218	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6792641	45.07010005	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6128423	45.3589134	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9277779	45.07416887	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8887584	45.1440493	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7869424	45.14067783	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6775808	45.13801376	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5802048	45.13566681	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5168432	45.22913207	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.4800443	45.18955626	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5666423	45.17873365	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6981156	45.1886391	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.4738774	45.26675596	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7368235	45.26935109	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.784381	45.31966458	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.703068	45.33537987	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7215527	45.46134361	MIZPAH	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9962867	45.33689316	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9325316	45.33710215	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9621328	45.30947587	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.994136	45.28023186	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9375915	45.27893984	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9579691	45.24610718	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.881452	45.71725511	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.757723	45.71928418	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6220247	45.72253455	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4959005	45.72421274	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3998157	45.78322101	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5306526	45.78510384	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6638756	45.78689404	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8020263	45.78531354	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3524423	45.8618565	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4549907	45.86135873	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5429837	45.86538099	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5608358	45.93247641	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4728256	45.92680484	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3890316	45.93117554	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.324293	45.93602503	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2782499	45.98802101	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3614704	45.99537505	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4453652	45.99102485	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5432926	45.99197974	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5908348	46.04152496	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4639721	46.04316764	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.37054	46.045603	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3032753	46.05037398	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3718811	46.10561053	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4461942	46.10431984	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5325503	46.10163267	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6275848	46.11575769	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5439175	46.1569001	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9475016	45.69484378	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4571953	46.16458578	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.7578172	45.44657007	STILLWATER	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-108.6823126	46.32003994	UPPER MUSSELSHELL	Musselshell	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714

Scenario 1 - SEIS RFD Emission Points by Watershed for Construction Emissions (1.5 g NOx for Engines)										
					Construction Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Construction Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-106.8323923	45.00783236	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7903307	45.00602084	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9091138	45.05136249	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7465796	45.01595443	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7077379	45.03416601	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7475796	45.13008114	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6493939	45.093755	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6734747	45.07500148	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7245767	45.07472301	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6865526	45.05802281	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.594975	45.04699579	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8194467	45.02325601	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5316421	45.01038326	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4704863	45.05358034	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4096151	45.01018167	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8651889	45.25176775	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8654241	45.22344433	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8622866	45.19582781	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7995346	45.25018769	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7985761	45.22419531	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7965835	45.19660405	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.864485	45.0093902	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9621692	45.00774532	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9790408	45.02701546	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6726239	45.00857642	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6092737	45.01086998	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6399265	45.03636498	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.747682	45.09523907	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3608313	45.00959182	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3042044	45.01032764	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2121315	45.00998408	UPPER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.245271	45.03143069	UPPER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3293535	45.03623872	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3869384	45.03866439	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5377621	45.04123955	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4660257	45.01332086	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5617171	45.0709975	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2852399	45.06959453	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2467164	45.05477978	UPPER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0890249	45.61690984	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0254773	45.5413516	UPPER YELLOWSTONE-LAKE BASIN	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0528827	45.65712391	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0026382	45.62533653	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.1067798	45.69927346	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0037776	45.69442736	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0537864	45.72626256	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0900954	45.76963276	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-108.3574854	46.19133291	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.8845271	46.21765128	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.222593	45.425538	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.278421	45.33934	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.251687	45.280535	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.17026	45.250393	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.159928	45.205637	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.234891	45.209166	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.195872	45.13131	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
			Totals	**650**	**616**	**210**	**68**	**41**	**145**	**52**

Scenario 1 - SEIS RFD Emission Points by Watershed for Operational Emissions (1.5 g NOx for Engines)

					Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Operational Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.9441365	45.17350559	CLARKS FORK YELLOWSTONE	Carbon	99.45	27.54055	2.524917	1.419384	0.094527	33.35451	15.34507
-108.9547988	45.02511074	CLARKS FORK YELLOWSTONE	Carbon	100.35	27.78979	2.547768	1.432229	0.095382	33.65637	15.48394
-109.0888964	45.29528577	CLARKS FORK YELLOWSTONE	Carbon	99.45	27.54055	2.524917	1.419384	0.094527	33.35451	15.34507
-109.0499645	45.44325647	CLARKS FORK YELLOWSTONE	Carbon	100.35	27.78979	2.547768	1.432229	0.095382	33.65637	15.48394
-105.5441521	45.01011264	LITTLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.4367862	45.14408638	LITTLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.6163493	46.03435575	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.2566985	45.82981624	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.2689192	45.9319004	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.2371025	45.91155283	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.2876139	45.87320735	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.3704664	45.9433915	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.3833798	45.91986854	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.2206782	45.78953449	LOWER BIGHORN	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.8950719	45.32372874	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.1906473	45.04845919	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.127224	45.0482058	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.0662494	45.0463265	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.0192953	45.08316794	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.0850023	45.08521834	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.150915	45.08390454	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.2145762	45.08081906	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-105.9627608	45.12005428	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.1962674	45.11191918	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-106.1351194	45.11174049	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.0714183	45.11478024	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-106.0125111	45.11626908	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-105.8058573	45.39278421	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-106.000915	45.15088418	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.0575099	45.14932839	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-106.1091992	45.15092488	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.1658912	45.1476511	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-106.2270788	45.14781278	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-105.957088	45.15485509	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-105.8427057	45.47897521	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-105.7670751	45.58143586	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-105.7724857	45.67659425	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-105.7939829	45.78061951	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-105.7968544	45.87902714	LOWER TONGUE	Custer	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.8384004	45.56452059	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.2169993	45.59975321	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-106.1245521	45.72872913	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.1463546	45.51900756	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-105.9185693	45.75201292	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-105.9469395	45.84556398	LOWER TONGUE	Custer	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.1199013	45.82426101	LOWER TONGUE	Custer	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.1862006	45.74380863	LOWER TONGUE	Powder River	90.45	25.04815	2.296414	1.290931	0.085972	30.33595	13.95635
-106.1732814	45.41523309	LOWER TONGUE	Powder River	89.55	24.79891	2.273564	1.278085	0.085117	30.0341	13.81748
-107.1353247	45.7765741	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-107.1853627	45.84829915	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-107.1159668	45.83910419	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-106.9493448	45.79823964	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-106.9102423	45.80233865	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-106.9500425	45.73349506	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-107.1777591	45.90447616	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-106.9564803	45.82575858	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	25.54663	2.342115	1.316621	0.087683	30.93966	14.23409
-106.9837523	45.77697522	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-106.9834606	45.81344396	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	25.54663	2.342115	1.316621	0.087683	30.93966	14.23409
-106.9801085	45.85184712	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-107.0672212	45.87672105	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	25.54663	2.342115	1.316621	0.087683	30.93966	14.23409
-106.985258	45.73936775	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-106.9950453	45.7146349	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	25.54663	2.342115	1.316621	0.087683	30.93966	14.23409
-106.9791728	45.89239879	LOWER YELLOWSTONE-SUNDAY	Treasure	21.15	5.856681	0.53694	0.301841	0.020102	7.093058	3.26323
-106.9482033	45.76730492	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	25.79587	2.364965	1.329467	0.088539	31.24152	14.37296
-107.1261029	45.89324815	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	25.54663	2.342115	1.316621	0.087683	30.93966	14.23409

Scenario 1 - SEIS RFD Emission Points by Watershed for Operational Emissions (1.5 g NOx for Engines)

					Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Operational Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.1869611	46.42502531	MIDDLE MUSSELSHELL	Musselshell	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.1538128	45.00373939	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.0026151	45.00435919	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.8748974	45.01191736	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7462246	45.01080066	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6336909	45.01434879	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5669066	45.06934218	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6792641	45.07010005	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6128423	45.3589134	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.9277779	45.07416887	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.8887584	45.1440493	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7869424	45.14067783	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6775808	45.13801376	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5802048	45.13566681	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5168432	45.22913207	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.4800443	45.18955626	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5666423	45.17873365	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6981156	45.1886391	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.4738774	45.26675596	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7368235	45.26935109	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.784381	45.31966458	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.703068	45.33537987	MIDDLE POWDER	Powder River	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7215527	45.46134361	MIZPAH	Powder River	111.15	30.78067	2.821971	1.586373	0.105648	37.27864	17.1504
-106.9962867	45.33689316	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9325316	45.33710215	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9621328	45.30947587	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.994136	45.28023186	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9375915	45.27893984	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9579691	45.24610718	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.881452	45.71725511	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.757723	45.71928418	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.6220247	45.72253455	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4959005	45.72421274	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3998157	45.78322101	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5306526	45.78510384	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.6638756	45.78689404	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.8020263	45.78531354	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3524423	45.8618565	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4549907	45.86135873	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5429837	45.86538099	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5608358	45.93247641	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4728256	45.92680484	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3890316	45.93117554	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.324293	45.93602503	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.2782499	45.98802101	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3614704	45.99537505	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4453652	45.99102485	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5432926	45.99197974	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5908348	46.04152496	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4639721	46.04316764	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.37054	46.045603	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3032753	46.05037398	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3718811	46.10561053	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4461942	46.10431984	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5325503	46.10163267	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.6275848	46.11575769	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5439175	46.1569001	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9475016	45.69484378	ROSEBUD	Big Horn	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4571953	46.16458578	ROSEBUD	Rosebud	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.7578172	45.44657007	STILLWATER	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-108.6823126	46.32003994	UPPER MUSSELSHELL	Musselshell	66.15	18.31867	1.679456	0.944107	0.062875	22.18585	10.20681

Scenario 1 - SEIS RFD Emission Points by Watershed for Operational Emissions (1.5 g NOx for Engines)

					Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Operational Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-106.8323923	45.00783236	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.7903307	45.00602084	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.9091138	45.05136249	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.7465796	45.01595443	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7077379	45.03416601	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.7475796	45.13008114	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6493939	45.093755	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.6734747	45.07500148	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7245767	45.07472301	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.6865526	45.05802281	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.594975	45.04699579	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.8194467	45.02325601	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.5316421	45.01038326	UPPER TONGUE	Big Horn	86.12	23.84988	2.186557	1.229174	0.08186	28.88472	13.2887
-106.4704863	45.05358034	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.4096151	45.01018167	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.8651889	45.25176775	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.8654241	45.22344433	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.8622866	45.19582781	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7995346	45.25018769	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7985761	45.22419531	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7965835	45.19660405	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.864485	45.0093902	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.9621692	45.00774532	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.9790408	45.02701546	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6726239	45.00857642	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6092737	45.01086998	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6399265	45.03636498	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.747682	45.09523907	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.3608313	45.00959182	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.3042044	45.01032764	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.2121315	45.00998408	UPPER TONGUE	Powder River	87.02	24.09912	2.209407	1.24202	0.082715	29.18658	13.42757
-106.245271	45.03143069	UPPER TONGUE	Powder River	87.02	24.09912	2.209407	1.24202	0.082715	29.18658	13.42757
-106.3293535	45.03623872	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.3869384	45.03866439	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.5377621	45.04123955	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.4660257	45.01332086	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.5617171	45.0709975	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.2852399	45.06959453	UPPER TONGUE	Big Horn	85.22	23.60064	2.163707	1.216329	0.081004	28.58287	13.14982
-106.2467164	45.05477978	UPPER TONGUE	Powder River	87.02	24.09912	2.209407	1.24202	0.082715	29.18658	13.42757
-109.0890249	45.61690984	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0254773	45.5413516	UPPER YELLOWSTONE-LAKE BASIN	Carbon	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0528827	45.65712391	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0026382	45.62533653	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.1067798	45.69927346	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0037776	45.69442736	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0537864	45.72626256	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0900954	45.76963276	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-108.3574854	46.19133291	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.8845271	46.21765128	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	88.65	24.54967	2.250713	1.26524	0.084261	29.73224	13.6786
-107.222593	45.425538	LITTLE BIGHORN	Big Horn	97.71	27.06033	2.480891	1.394634	0.092879	32.77291	15.0775
-107.278421	45.33934	LITTLE BIGHORN	Big Horn	95.91	26.56185	2.43519	1.368944	0.091168	32.1692	14.79975
-107.251687	45.280535	LITTLE BIGHORN	Big Horn	95.91	26.56185	2.43519	1.368944	0.091168	32.1692	14.79975
-107.17026	45.250393	LITTLE BIGHORN	Big Horn	95.91	26.56185	2.43519	1.368944	0.091168	32.1692	14.79975
-107.159928	45.205637	LITTLE BIGHORN	Big Horn	95.91	26.56185	2.43519	1.368944	0.091168	32.1692	14.79975
-107.234891	45.209166	LITTLE BIGHORN	Big Horn	95.91	26.56185	2.43519	1.368944	0.091168	32.1692	14.79975
-107.195872	45.13131	LITTLE BIGHORN	Big Horn	97.71	27.06033	2.480891	1.394634	0.092879	32.77291	15.0775
			Totals	**16,157**	**4,474**	**410**	**231**	**15**	**5,419**	**2,493**

A.4.1 Emission Calculations for the Montana CBNG Project Construction Activities - Scenario 2

Heavy Equipment

Fugitive Dust Emissions

Emission Factors for Construction Activities

				Reference
E	=	1.2 Tons of TSP/acre/month		EPA, AP-42, Volume I, Section 13.2.3 Heavy Construction Operations (1/95)
PM10	=	26 % of TSP		Argonne National Laboratory - 2002 TSD
PM2.5	=	15 % of PM10		Argonne National Laboratory - 2002 TSD
CE	=	50 %	Control Efficiency for watering	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emission Calculations for Construction Activities

Area Disturbed for CBNG Wells	Emission Estimation Basis	Disturbed Area (acre)	Avg. # of Days to Complete	Total # of Well Pads or Stations	Total Disturbed Area	Emissions (lb/well pad, lb/stn, or lb/project)			Emissions (ton/project)		
						TSP	PM10	PM2.5	TSP	PM10	PM2.5
Road	per Well Pad	0.75	3	6,075	4,556	90	23	4	273	71	11
Well Pad	per Well Pad	0.25	3	6,075	1,519	30	8	1	91	24	4
Gathering Poly Pipeline (Low Pressure)	per Well Pad	1.5	1	6,075	9,113	60	16	2	182	47	7
Steel Pipeline (Low/IntermediatePressure)	per Field Station	6.06	1	673	4,078	242	63	9	82	21	3
Sales Pipeline, 36" D x 600 miles	per Project		1		1,316	52,640	13,686	2,053	26	7	1
Electric Line	per Well Pad	0.35	1	6,075	2,126	14	4	1	43	11	2
Field Compressor Station	per Field Station	2	5	404	808	400	104	16	81	21	3
Sales Compressor Station	per Sales Station	1	5	81	81	200	52	8	8	2	0
Impoundment	per Impoundment	6	5	356	2,136	1,200	312	47	214	56	8
				Total	**25,733**				**1,000**	**260**	**39**

Exhaust Emissions

Emission Factors for Construction Equipment EPA, AP-42, Volume II, Section 11-7 Heavy-Duty Construction Equipment (9/85)

Equipment	Emission Factors (g/hp-hr)					Equipment Category in AP-42
	NOx	PM10	SO2	CO	VOCs	
Backhoe	8.81	0.81	0.86	2.71	0.97	Wheeled Loader
Dozer	7.81	0.69	0.85	2.15	0.75	Track-type Tractor
Blade	7.14	0.63	0.87	1.54	0.36	Motor Grader
Trencher	11.01	0.90	0.93	4.60	1.01	Miscellaneous
Trackhoe	9.30	0.66	0.85	2.26	1.11	Track-type Tractor

Emissions Estimation for Construction Equipment

Construction Site	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well Pad or	# of Operating Hours per Well Pad or per Station	# of Well Pads or Stations	Emissions (lb/well pad, lb/stn, or lb/project)					Emissions (ton/equipment type)					Emissions (ton/construction site)				
									NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Road	Blade	100	1	80	10	0.2	2	6,075	3	0.2	0.3	0.5	0.1	8	1	1	2	0					
	Backhoe	80	1	75	10	0.1	1	6,075	1.2	0.1	0.1	0.4	0.1	4	0	0	1	0	11	1	1	3	1
Well Pad	Backhoe	80	1	75	10	0.5	5	6,075	6	0.5	0.6	2	0.6	18	2	2	5	2	18	2	2	5	2
Gathering Poly Pipeline (Low Pressure)	Blade	100	1	80	10	0.25	2.5	6,075	3	0.3	0.4	0.7	0.2	10	1	1	2	0					
	Trencher	175	1	80	10	1	10	6,075	34	3	3	14	3	103	8	9	43	9					
	Backhoe	80	1	75	10	0.25	2.5	6,075	3	0.3	0.3	0.9	0.3	9	1	1	3	1	122	10	11	48	11
Steel Pipeline (Low/Intermediate Pressure)	Blade	100	1	80	10	5	50	404	63	5.6	7.7	13.6	3.2	13	1	2	3	1					
	Trencher	175	1	80	10	5	50	404	170	13.9	14.4	71.0	15.6	34	3	3	14	3					
	Trackhoe	75	1	75	10	10	100	404	115	8.2	10.5	28.0	13.8	23	2	2	6	3	70	6	7	23	7
Steel Pipeline (Sales)	Blade	100	1	80	10	43.4	434.3	1	547	48	67	118	28	0.27	0.02	0.03	0.06	0.01					
	Trencher	175	1	80	10	43.4	434.3	1	1,476	121	125	617	135	0.74	0.06	0.06	0.31	0.07					
	Trackhoe	75	1	75	10	65.1	651.4	1	751	53	69	183	90	0.38	0.03	0.03	0.09	0.04	1.39	0.11	0.13	0.46	0.13
Field Compressor Station	Dozer	350	1	80	8	2	16	404	77	7	8	21	7	15.6	1.4	1.7	4.3	1.5					
	Backhoe	80	2	80	8	3	24	404	60	5	6	18	7	12.1	1.1	1.2	3.7	1.3	27.6	2.5	2.9	8.0	2.8
Sales Compressor Station	Dozer	350	1	80	8	2	16	81	77	7	8	21	7	3.1	0.3	0.3	0.9	0.3					
	Backhoe	80	2	80	8	3	24	81	60	5	6	18	7	2.4	0.2	0.2	0.7	0.3	5.5	0.5	0.6	1.6	0.6
Impoundment	Dozer	350	1	80	8	0.4	3.2	356	15	1	2	4	1	2.7	0.2	0.3	0.8	0.3					
	Blade	100	1	80	8	0.4	3.2	356	4	0	0	1	0	0.7	0.1	0.1	0.2	0.0	3.5	0.3	0.4	0.9	0.3
													Subtotal:	**259**	**22**	**24**	**90**	**24**	**259**	**22**	**24**	**90**	**24**

Emissions Estimation for Industrial Engines

Construction Site Activity	Equipment Type	Capacity (hp)	# of Units	Avg. Load Factor (%)	# of Operating Hours per Day	# of Operating Days per Well	# of Operating Hours per Well	# of Wells	Emissions (lb/well)					Emissions (ton/equipment type)					Emissions (ton/project activity)				
									NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Main Deck	400	1	60	11	3	33	18,225	246	17	16	53	20	2,237	159	148	482	181	3,254	231	215	701	263
	Auxillary Pump	200	1	90	10	2	20	18,225	112	8	7	24	9	1,017	72	67	219	82					
Well Completion & Testing	Main Deck	400	1	60	10	1	10	18,225	74	5	5	16	6	678	48	45	146	55	13,716	975	905	3,154	1,143
	Auxillary Pump	125	1	90	6	1	6	18,225	21	1	1	5	2	191	14	13	41	15					
	Equipment Type	**Capacity (kw)**	**Avg # of Wells Served**	**Avg. Load Factor (%)**	**# of Operating Hours per Day**	**Avg. # of Operating Days**	**# of Operating Hours per Well**	**# of Wells**															
	Field Generators for Pumps & Lighting	125	8	75	24	120	360	18,225	1403	100	93	302	114	12,810	909	847	2,760	1,037					
	Emission Source	**Average Volume Flared (MCFD/well)**			**Average # Days of Continuous Flaring**			**# of Wells**															
	Flaring of Natural Gas	60			1			18,225	4	0.5	0.0	23	4	38	4	0	207	35					
													Subtotal:	**16,971**	**1,206**	**1,120**	**3,855**	**1,406**	**16,971**	**1,206**	**1,120**	**3,855**	**1,406**
													Total:	**17,229**	**1,228**	**1,144**	**3,945**	**1,430**	**17,229**	**1,228**	**1,144**	**3,945**	**1,430**

PM2.5 is assumed to be same as PM10

Commuting Vehicles

Road Dust Emissions

Emission Factors for Road Traffic

$$E\ (lb/VMT) = \frac{k\ (s/12)^a\ (W/3)^b}{(M/0.2)^c}$$

Parameter	PM10	PM2.5
k	2.6	0.38
a	0.8	0.8
b	0.4	0.4
c	0.3	0.3

Source: EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)

Function/Variable Description	Assumed Value	Reference
E = size-specific emission factor (lb/VMT)		
s = surface material silt content (%)	5.1	EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
W = mean vehicle weight (tons)	listed in table below	
M = surface material moisture content (%)	0.2	Default value in EPA, AP-42, Volume I, Section 13.2.2 Unpaved Roads (9/98)
CE = control efficiency for watering (%)	50	EPA, Control of Open Fugitive Dust Sources, Section 5.3.1 Watering of Unpaved Surfaces (1988)

Emissions Estimation for Road Traffic

Construction Site Destination	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well pad, lb/stn, or lb/project)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Road	Semi Trucks	60,000	6	2.6	16	6,075	1.65	26	78	78	0.24	4	11	11
Well Pad	Haul Trucks	45,000	6	2	12	6,075	1.47	18	54		0.21	3	8	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	79	0.10	1	4	12
Poly Pipeline, < 3"	Haul Trucks	45,000	6	4	24	6,075	1.47	35	107		0.21	5	16	
	Pickup Trucks	7,000	6	4	24	6,075	0.70	17	51	158	0.10	2	7	23
Steel Pipeline	Semi Trucks	60,000	6	4	24	404	1.65	40	8		0.24	6	1	
	Haul Trucks	45,000	6	40	240	404	1.47	352	71		0.21	51	10	
	Pickup Trucks	7,000	6	160	960	404	0.70	669	135	214	0.10	98	20	31
Sales Pipeline, 36" D, 600 mi	Semi Trucks	60,000	35	94	3,290	1	1.65	5418	3		0.24	792	0	
	Haul Trucks	45,000	35	94	3,290	1	1.47	4829	2		0.21	706	0	
	Pickup Trucks	7,000	50	94	4,700	1	0.70	3277	2	7	0.10	479	0	1
Electric Line	Haul Trucks	45,000	6	1	6	6,075	1.47	9	27		0.21	1	4	
	Pickup Trucks	7,000	6	2	12	6,075	0.70	8	25	52	0.10	1	4	8
Field Compressor Station	Semi Trucks	60,000	10	15	150	404	1.65	247	50		0.24	36	7	
	Haul Trucks	45,000	10	48	480	404	1.47	705	142		0.21	103	21	
	Pickup Trucks	7,000	10	192	1,920	404	0.70	1339	270	463	0.10	196	40	68
Sales Compressor Station	Semi Trucks	60,000	10	18.5	185	81	1.65	305	12		0.24	45	2	
	Haul Trucks	45,000	10	48	480	81	1.47	705	29		0.21	103	4	
	Pickup Trucks	7,000	10	192	1,920	81	0.70	1339	54	95	0.10	196	8	14
Impoundment	Semi Trucks	60,000	6	0.02	0.12	356	1.65	0	0		0.24	0	0	
	Haul Trucks	45,000	6	0.02	0.12	356	1.47	0	0		0.21	0	0	
	Pickup Trucks	7,000	6	0.02	0.12	356	0.70	0	0	0	0.10	0	0	0
								Subtotal:	**1,146**	**1,146**			**167**	**167**

Emissions Estimation for Road Traffic Continued

Construction Site Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	PM10 Emissions				PM2.5 Emissions			
							Controlled Em. Factor (lb/VMT)	Emissions (lb/well)	Emissions (ton/veh. type)	Emissions (ton/proj. activity)	Controlled Em. Factor (lb/VMT)	Emissions (lb/well)	Emissions (ton/veh. type)	Emissions (ton/const. site)
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	80,000	6	1	6	18,225	1.85	11	101	1,587	0.27	2	15	232
	Fuel Haul Truck	45,000	6	2	12	18,225	1.47	18	161		0.21	3	23	
	Mud Haul Truck, Water Hauling	60,000	6	7	42	18,225	1.65	69	630		0.24	10	92	
	Rig Crew	7,000	6	3	18	18,225	0.70	13	114		0.10	2	17	
	Co. Supervisor	7,000	6	8	48	18,225	0.70	33	305		0.10	5	45	
	Tool Pusher	7,000	6	6	36	18,225	0.70	25	229		0.10	4	33	
	Logger, Engr. Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
Well Completion & Testing	Semi Casing	45,000	6	1	6	18,225	1.47	9	80	1,663	0.21	1	12	243
	Semi Completion, Unit Rig	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Tubing Truck	45,000	6	1	6	18,225	1.47	9	80		0.21	1	12	
	Haul Cementer, Pump Truck	80,000	6	1	6	18,225	1.85	11	101		0.27	2	15	
	Haul Cementer, Cement Truck	60,000	6	1	6	18,225	1.65	10	90		0.24	1	13	
	Haul Completion, Equip. Truck	20,000	6	1	6	18,225	1.06	6	58		0.16	1	8	
	Haul Preforators, Logging Truck	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Welders	12,000	6	1	6	18,225	0.87	5	47		0.13	1	7	
	Haul Water Truck	60,000	6	9	54	18,225	1.65	89	810		0.24	13	118	
	Pickup Cementor, Engineer	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Co. Supervisor	7,000	6	2	12	18,225	0.70	8	76		0.10	1	11	
	Pickup Miscellaneous Supplies	7,000	6	1	6	18,225	0.70	4	38		0.10	1	6	
	Pickup Roustabout Crew	12,000	6	2	12	18,225	0.87	10	95		0.13	2	14	
								Subtotal:	3,250	3,250			475	475
								Total:	4,396	4,396			642	642

Vehicle		Emission Factors (g/mi)					
Type	Class	NOx	PM10	PM2.5	SO2	CO	VOCs
Light-Duty Gasoline Truck	LDGT2	1.01	0.10	0.08	0.11	11.64	0.75
Heavy-Duty Diesel Truck	HDDV	8.13	1.96	1.81	1.63	17.09	4.83

PM10 and PM2.5 were estimated using the EPA PARTS model (1995) and include tire and break wear emissions.

Source: EPA, AP-42, Volume II, Appendix H-117, Table 3.1A.2 Light-Duty Gasoline Powered Trucks and
Appendix H-259, Table 7.1.2 Heavy-Duty Diesel Powered Vehicles (High Altitude; Model Year 1991-1997; 50,000 mileage) (6/30/95)

Vehicle		Emission Factors (g/mi)					
Type	Class	NOx	PM10	PM2.5	SO2	CO	VOCs
Light-Duty Gasoline Truck	LDGT2	1.01	0.10	0.08	0.11	11.64	0.75
Heavy-Duty Diesel Truck	HDDV	8.13	1.96	1.81	1.63	17.09	4.83

PM10 and PM2.5 were estimated using the EPA PARTS model (1995) and include tire and break wear emissions.

Source: EPA, AP-42, Volume II, Appendix H-117, Table 3.1A.2 Light-Duty Gasoline Powered Trucks and
Appendix H-259, Table 7.1.2 Heavy-Duty Diesel Powered Vehicles (High Altitude; Model Year 1991-1997; 50,000 mileage) (6/30/95)

Exhaust Emissions

Emissions Estimation for Road Traffic Exhaust

Construction Site Destination	Vehicle		Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	Emissions																	
							(lb/well pad, lb/station, or lb/project)						(ton/equipment type)						(ton/construction site)					
	Type	Class					NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Road	Semi Trucks	HDDV	6	2.6	16	6,075	0.28	0.07	0.06	0.06	0.59	0.17	0.8	0.2	0.2	0.2	1.8	0.5	0.8	0.2	0.2	0.2	1.8	0.5
Well Pad	Haul Trucks	HDDV	6	2	12	6,075	0.22	0.05	0.05	0.04	0.45	0.13	0.7	0.2	0.1	0.1	1.4	0.4	0.7	0.2	0.2	0.1	2.3	0.4
	Pickup Trucks	LDGT2	6	2	12	6,075	0.03	0.00	0.00	0.00	0.31	0.02	0.1	0.0	0.0	0.0	0.9	0.1						
Poly Pipeline, < 3"	Haul Trucks	HDDV	6	4	24	6,075	0.43	0.10	0.10	0.09	0.90	0.26	1.3	0.3	0.3	0.3	2.7	0.8	1.5	0.3	0.3	0.3	4.6	0.9
	Pickup Trucks	LDGT2	6	4	24	6,075	0.05	0.01	0.00	0.01	0.62	0.04	0.2	0.0	0.0	0.0	1.9	0.1						
Steel Pipeline	Semi Trucks	HDDV	6	4	24	404	0.43	0.10	0.10	0.09	0.90	0.26	0.1	0.0	0.0	0.0	0.2	0.1	1.4	0.3	0.2	0.2	7.0	0.9
	Haul Trucks	HDDV	6	40	240	404	4.30	1.04	0.96	0.86	9.04	2.56	0.9	0.2	0.2	0.2	1.8	0.5						
	Pickup Trucks	LDGT2	6	160	960	404	2.14	0.21	0.17	0.23	24.64	1.59	0.4	0.0	0.0	0.0	5.0	0.3						
Sales Pipeline, 36" D, 600 mi	Semi Trucks	HDDV	35	94	3,293		59.02	14.23	13.14	11.83	124.07	35.06	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
	Haul Trucks	HDDV	35	94	3,293		59.02	14.23	13.14	11.83	124.07	35.06	0.0	0.0	0.0	0.0	0.0	0.0						
	Pickup Trucks	LDGT2	50	94	4,700		10.47	1.04	0.83	1.14	120.61	7.77	0.0	0.0	0.0	0.0	0.0	0.0						
Electric Line	Haul Trucks	HDDV	6	1	6	6,075	0.11	0.03	0.02	0.02	0.23	0.06	0.3	0.1	0.1	0.1	0.7	0.2	0.4	0.1	0.1	0.1	1.6	0.3
	Pickup Trucks	LDGT2	6	2	12	6,075	0.03	0.00	0.00	0.00	0.31	0.02	0.1	0.0	0.0	0.0	0.9	0.1						
Field Compressor Station	Semi Trucks	HDDV	10	15	150	404	2.69	0.65	0.60	0.54	5.65	1.60	0.5	0.1	0.1	0.1	1.1	0.3	3.1	0.6	0.6	0.6	14.7	2.0
	Haul Trucks	HDDV	10	48	480	404	8.60	2.07	1.92	1.72	18.09	5.11	1.7	0.4	0.4	0.3	3.7	1.0						
	Pickup Trucks	LDGT2	10	192	1,920	404	4.28	0.42	0.34	0.47	49.27	3.17	0.9	0.1	0.1	0.1	10.0	0.6						
Sales Compressor Station	Semi Trucks	HDDV	10	18.5	185	81	3.32	0.80	0.74	0.66	6.97	1.97	0.1	0.0	0.0	0.0	0.3	0.1	0.7	0.1	0.1	0.1	3.0	0.4
	Haul Trucks	HDDV	10	48	480	81	8.60	2.07	1.92	1.72	18.09	5.11	0.3	0.1	0.1	0.1	0.7	0.2						
	Pickup Trucks	LDGT2	10	192	1,920	81	4.28	0.42	0.34	0.47	49.27	3.17	0.2	0.0	0.0	0.0	2.0	0.1						
Impoundment	Semi Trucks	HDDV	6	0.02	0.12	356	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Haul Trucks	HDDV	6	0.02	0.12	356	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0						
	Pickup Trucks	LDGT2	6	0.02	0.12	356	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0						
												Subtotal	9	2	2	2	35	5	9	2	2	2	35	5

Construction Site Activity	Vehicle		Round Trip Distance (mi)	# of Round Trips per Well Pad or per Station	Miles Traveled per Well Pad or per Station	Total # of Well Pads or Stations	Emissions																	
	Type	Class					(lb/well pad, lb/station, or lb/project)						(ton/equipment type)						(ton/construction site)					
							NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Rig-up, Drilling, and Rig-down	Semi Rig Transport, Drill Rig	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6	18.0	4.1	3.8	3.5	50.5	10.9
	Fuel Haul Truck	HDDV	6	2	12	18,225	0.22	0.05	0.05	0.04	0.45	0.13	2.0	0.5	0.4	0.4	4.1	1.2						
	Mud Haul Truck, Water Hauling	HDDV	6	7	42	18,225	0.75	0.18	0.17	0.15	1.58	0.45	6.9	1.7	1.5	1.4	14.4	4.1						
	Rig Crew	LDGT2	6	3	18	18,225	0.04	0.00	0.00	0.00	0.46	0.03	0.4	0.0	0.0	0.0	4.2	0.3						
	Co. Supervisor	LDGT2	6	8	48	18,225	0.11	0.01	0.01	0.01	1.23	0.08	1.0	0.1	0.1	0.1	11.2	0.7						
	Tool Pusher	HDDV	6	6	36	18,225	0.65	0.16	0.14	0.13	1.36	0.38	5.9	1.4	1.3	1.2	12.4	3.5						
	Logger, Engr. Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
Well Completion & Testing	Semi Casing	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6	20.1	4.8	4.4	4.0	46.8	12.0
	Semi Completion, Unit Rig	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Tubing Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Cementer, Pump Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Cementer, Cement Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Completion, Equip. Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Preforators, Logging Truck	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Welders	HDDV	6	1	6	18,225	0.11	0.03	0.02	0.02	0.23	0.06	1.0	0.2	0.2	0.2	2.1	0.6						
	Haul Water Truck	HDDV	6	10	60	18,225	1.08	0.26	0.24	0.22	2.26	0.64	9.8	2.4	2.2	2.0	20.6	5.8						
	Pickup Cementor, Engineer	LDGT2	6	1	6	18,225	0.01	0.00	0.00	0.00	0.15	0.01	0.1	0.0	0.0	0.0	1.4	0.1						
	Pickup Co. Supervisor	LDGT2	6	2	12	18,225	0.03	0.00	0.00	0.00	0.31	0.02	0.2	0.0	0.0	0.0	2.8	0.2						
	Pickup Miscellaneous Supplies	LDGT2	6	1	6	18,225	0.01	0.00	0.00	0.00	0.15	0.01	0.1	0.0	0.0	0.0	1.4	0.1						
	Pickup Roustabout Crew	HDDV	6	2	12	18,225	0.22	0.05	0.05	0.04	0.45	0.13	2.0	0.5	0.4	0.4	4.1	1.2						
												Subtotal:	**38**	**9**	**8**	**7**	**97**	**23**	**38**	**9**	**8**	**7**	**97**	**23**
												Total:	**47**	**11**	**10**	**9**	**132**	**28**	**47**	**11**	**10**	**9**	**133**	**28**

A.4.2 Emission Calculations for the Montana CBNG Project Operational Activities - Scenario 2

Compressors – Natural Gas Fired

Emission Factors for Compressors:

Compressor			Make	Model	Capacity (hp)	Emission Factors (g/hp-hr)					
						NOx	PM10	SO2	CO	VOCs	HCHO
Field	Rich Burn	50%	Caterpillar	G3408	400	1.00	6.60E-02	2.00E-03	2.00	1.00	0.05
	Lean Burn	50%	Waukesha	F18GL	400	1.00	6.60E-02	2.00E-03	1.50	0.50	0.20
Sales	Rich Burn	50%	Waukesha	7044GSI	1680	1.00	6.60E-02	2.00E-03	2.00	1.00	0.05
	Lean Burn	25%	Waukesha	7044GSI	1680	1.00	6.60E-02	2.00E-03	2.00	1.00	0.05
		25%	Waukesha	7044GSI	1680	1.00	6.60E-02	2.00E-03	2.00	1.00	0.05

Emissions Estimation for Compressors:

Type of Compressors	Total # of Operating Station-Year	Operating Hours per Year	Total Emissions (ton/project)				
			NOx	PM10	SO2	CO	VOCs
Field	4,380	8,760	16,918	1,117	34	29,606	12,688
Sales	876	8,760	14,211	938	28	28,422	14,211
		Total	**31,129**	**2,055**	**62**	**58,028**	**26,899**

Assume PM2.5 is same as PM10

Dehydrators

Emission Factors for Dehydrators

Unit	NOx	PM10	SO2	CO	VOCs
lb/MMscf	100	7.6	0.6	84	5.5
lb/MMBtu	9.80E-02	7.45E-03	5.88E-04	8.24E-02	5.39E-03

Emissions Estimations for Dehydrators

Compressor Station	Total Gas Production Rate (MMCFD-yr)	Firing Rate (Btu/hr/MMCFD)	Operating Hours per Year	Total Emissions (ton/project)				
				NOx	PM10	SO2	CO	VOCs
Sales	44,944	25,000	8,760	482	37	3	406	27

Compressor Station Visits for Inspection and Repair

Road Dust Emissions

Emissions Estimates for Road Traffic:

Activity	Compressor Station	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Stations Visited per Day	# of Visits per Station per Year	Miles Traveled per Station per Year	Total # of Operating Station-Yr	PM10			PM2.5		
									Em. Factor (lb/VMT)	Emissions (lb/ station-yr)	Emissions (ton/ project)	Em. Factor (lb/VMT)	Emissions (lb/ station-yr)	Emissions (ton/ project)
Inspection Visits for Compressor Stations	Field	Pickup Truck	7,000	20	15	12	16	4,380	1.03	16.5	36	0.15	2.4	5
	Sales	Pickup Truck	7,000	20	15	52	69	876	1.03	71.4	31	0.15	10.4	5
										Total:	**67**			**10**

Exhaust Emissions

Activity	Compressor Station	Vehicle		Round Trip Distance (mi/day)	# of Stations Visited per Day	# of Visits per Station per Year	Miles Traveled per Station per Year	Total # of Operating Station-Yr	Emissions											
		Type	Class						(lb/station-yr)						(ton/project)					
									NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Inspection Visits for Compressor Stations	Field	Pickup Truck	LDGT2	20	15	12	16	4,380	0.04	0.00	0.00	0.00	0.41	0.03	0.1	0.0	0.0	0.0	0.9	0.1
	Sales	Pickup Truck	LDGT2	20	15	52	69	876	0.15	0.02	0.01	0.02	1.78	0.11	0.1	0.0	0.0	0.0	0.8	0.1
														Totals:	**0.1**	**0.0**	**0.0**	**0.0**	**1.7**	**0.1**

Well Workover

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	PM10 Emissions			PM2.5 Emissions		
							Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
								(lb/well)	(ton/project)		(lb/well)	(ton/project)
Well Workover	Bobtail Truck	40,000	50	1	50	18,225	2.06	103	939	0.30	15	138

Exhaust Emissions – On-site

Emissions Estimation for Industrial Engines:

Activity	Equipment	Capacity (hp)	Operating Hours per Day	Total # of Wells Drilled	Emissions									
					(lb/well)					(ton/project)				
					NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Well Workover	Truck-Mounted Unit	400	10	18,225	124	9	8	27	10	1,130	80	75	243	91

Exhaust Emissions – On-site

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Round Trips per Well	Miles Traveled per Well	Total # of Wells Drilled	Emissions											
	Type	Class					(lb/station-yr)						(ton/project)					
							NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Well Workover	Bobtail Truck	HDDV	50	1	50	18,225	0.9	0.2	0.2	0.2	1.9	0.5	8	2	2	2	17	5

Well and Pipeline Visits for Inspection and Repair

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	PM10 Emissions			PM2.5 Emissions		
								Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
									(lb/well)	(ton/project)		(lb/well)	(ton/project)
Visits for Inspection and Repair	200-hp Pickup	7,000	75	120	12	7.5	175,181	1.03	7.7	677	0.15	1.1	99

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	# of Wells Visited per Day	# of Visits per Well per Year	Miles Traveled per Well per Year	Total # of Operating Well-Yr	Emissions											
	Type	Class						(lb/station-yr)						(ton/project)					
								NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
Visits for Inspection and Repair	200-hp Pickup	LDGT2	75	120	12	7.5	175,181	0.017	0.002	0.001	0.002	0.192	0.012	1.5	0.1	0.1	0.2	16.9	1.1

A.4.3 Emission Calculations for the Montana CBNG Maintenance Activities - Scenario 2

Road Maintenance – Heavy Equipment

Given Data:

Maintenance	Equipment/Vehicle			Road Length Worked On per Day (mi)	# of Operating Hours per Day
	Type	Fuel	Capacity (hp)		
Summer	Heavy Equipment	Diesel	135	6	10
	Commuting Vehicle	Gasoline	225	6	1
Winter	Heavy Equipment	Diesel	135	5	10
	Commuting Vehicle	Gasoline	225	6	1.5

Estimation of Total and Cumulative Length of Roads:

Total Length of Roads to be Built (mi)	6,224
Cummulative Length of Roads Maintained (mi-yr)	59,826

Estimation of Total Operation Days and Hours:

Season	# of Operation per Year	Cummulative Length of Roads (mi-yr)	Road Length Worked On (mi/day)	# of Operating Hours per Day	Total # of Operating Days	Total # of Operating Hours
Summer	2	59,826	6	10	19,942	199,420
Winter	1	59,826	5	10	11,965	119,652
				Totals:	31,907	319,071

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight (lb)	Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	PM10		PM2.5	
						Em. Factor (lb/VMT)	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/project)
Road Maintenance	Pickup Truck	7,000	6	31,907	191,443	1.03	99	0.15	14

Emissions Estimation for Road Traffic:

Activity	Vehicle		Round Trip Distance (mi/day)	Total # of Operating Days	Total Miles Traveled	Emissions (ton/project)					
	Type	Class				NOx	PM10	PM2.5	SO2	CO	VOCs
Road Maintenance	Pickup Truck	LDGT2	6	31,907	191,443	0.21	0.02	0.02	0.02	2.46	0.16

Fugitive Dust Emissions

Emissions Factor for Grader - Road Dust:

Pollutant	Emission Factor Equation (lb/VMT)	S (mph)	Emission Factor (lb/VMT)
PM10	E = (0.6)(0.051)(S^2)	5	0.765
PM2.5	E = (0.031)(0.051)(S^2.5)	5	0.069

Emissions Estimation for Grader - Road Dust:

Activity	Equipment	Total # of Operating Hours	Mean Vehicle Speed (mph)	Total Miles Maintained	PM10		PM2.5	
					Em. Factor (lb/VMT)	Emissions (ton/project)	Em. Factor (lb/VMT)	Emissions (ton/ project)
Road Maintenance	Grader	191,443	5	957,214	0.765	366	0.069	33

Exhaust Emissions

Emissions Factor for Grader - Exhaust:

Equipment	Emission Factors (g/hp-hr)				
	NOx	PM10	SO2	CO	VOCs
Grader	7.14	0.63	0.87	1.54	0.36

Emissions Estimation for Grader - Road Dust:

Activity	Vehicle Type	Capacity (hp)	Total # of Operating Hours	Emissions									
				(lb/well)					(ton/project)				
				NOx	PM10	SO2	CO	VOCs	NOx	PM10	SO2	CO	VOCs
Road Maintenance	Grader	135	191,443	2.13	0.19	0.26	0.46	0.11	203	18	25	44	10

Maintenance Visits to Compressor Stations

Road Dust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle Type	Avg. Vehicle Weight	Compressor Station	# of Stations	Cummulative # of Station-Yr	# of Visits per Year	Total # of Round Trips	Round Trip Distance	Total Miles Traveled	PM10		PM2.5	
										Em. Factor	Emissions (ton/project)	Em. Factor	Emissions (ton/project)
Maintenance Visits to Compressor Stations	Pickup Truck	7,000	Field	673	4,380	2	8,760	20	175,209	1.03	90	0.15	13
	Pickup Truck	7,000	Sales	67	876	2	1,752	20	35,042	1.03	18	0.15	3
										Totals:	108		16

Exhaust Emissions

Emissions Estimation for Road Traffic:

Activity	Vehicle		Compressor Station	# of Stations	Cummulative # of Station-Yr	# of Visits per Year	Total # of Round Trips	Round Trip Distance	Total Miles Traveled	Emissions (ton/project)					
	Type	Class								NOx	PM10	PM2.5	SO2	CO	VOCs
Inspection Visits for	Pickup Truck	LDGT2	Field	673	4,380	2	8,760	20	175,209	0.20	0.02	0.02	0.02	2.25	0.14
	Pickup Truck	LDGT2	Sales	67	876	2	1,752	20	35,042	0.04	0.00	0.00	0.00	0.45	0.03
									Totals:	0.23	0.02	0.02	0.03	2.70	0.17

A.4.4 ADY20 - Scenario 2

	Wells	Field	Sales
Ratio:	200	5	1

	Wells		Compressors					
Year	Drilled	Operating	Field	Sales	# Well Pads	# Operating Well Years	# Operating FC Years	# Operating SC Years
1	607	546	14	3	202	546	14	3
2	910	1,365	34	7	485	1,912	48	10
3	1,075	2,333	58	12	813	4,244	106	21
4	1,175	3,390	85	17	1,169	7,635	191	38
5	1,075	4,358	109	22	1,488	11,993	300	60
6	950	5,213	130	26	1,769	17,205	430	86
7	910	6,032	151	30	2,041	23,237	581	116
8	910	6,851	171	34	2,314	30,088	752	150
9	910	7,670	192	38	2,587	37,758	944	189
10	910	8,489	212	42	2,860	46,247	1,156	231
11	910	9,308	233	47	3,133	55,554	1,389	278
12	910	10,127	253	51	3,406	65,681	1,642	328
13	910	10,946	274	55	3,679	76,627	1,916	383
14	910	11,765	294	59	3,952	88,392	2,210	442
15	910	12,584	315	63	4,225	100,976	2,524	505
16	910	13,403	335	67	4,498	114,378	2,859	572
17	860	14,177	354	71	4,754	128,555	3,214	643
18	800	14,897	372	74	4,992	143,452	3,586	717
19	750	15,572	389	78	5,216	159,024	3,976	795
20	650	16,157	404	81	5,407	175,181	4,380	876
21	273	15,856	396	79	5,477	191,037	4,776	955
22	0	15,038	376	75	5,285	206,074	5,152	1,030
23	0	14,070	352	70	5,013	220,145	5,504	1,101
24	0	13,013	325	65	4,690	233,157	5,829	1,166
25	0	12,045	301	60	4,338	245,203	6,130	1,226
26	0	11,190	280	56	4,015	256,393	6,410	1,282
27	0	10,371	259	52	3,730	266,764	6,669	1,334
28	0	9,552	239	48	3,457	276,316	6,908	1,382
29	0	8,733	218	44	3,184	285,049	7,126	1,425
30	0	7,914	198	40	2,911	292,964	7,324	1,465
31	0	7,095	177	35	2,638	300,059	7,501	1,500
32	0	6,276	157	31	2,365	306,335	7,658	1,532
33	0	5,457	136	27	2,092	311,792	7,795	1,559
34	0	4,638	116	23	1,819	316,430	7,911	1,582
35	0	3,819	95	19	1,546	320,250	8,006	1,601
36	0	3,000	75	15	1,273	323,250	8,081	1,616
37	0	2,226	56	11	1,000	325,476	8,137	1,627
38	0	1,506	38	8	742	326,982	8,175	1,635
39	0	831	21	4	502	327,813	8,195	1,639
40	0	246	6	1	277	328,060	8,201	1,640
	18,225							

	Operation and Maintenance						Construction					
	Emissions						Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs	NOx	PM10	PM2.5	SO2	CO	VOCs
1	102.76	13.87	7.80	0.52	183.23	84.30	575.39	196.30	63.91	38.40	135.82	48.56
2	256.81	34.66	19.49	1.30	457.92	210.67	862.62	294.30	95.82	57.57	203.62	72.80
3	438.80	59.23	33.30	2.22	782.42	359.96	1,019.02	347.66	113.19	68.01	240.54	86.00
4	637.71	86.08	48.39	3.22	1,137.10	523.14	1,113.82	380.00	123.72	74.34	262.92	94.00
5	819.70	110.64	62.20	4.14	1,461.60	672.42	1,019.02	347.66	113.19	68.01	240.54	86.00
6	980.52	132.35	74.40	4.95	1,748.37	804.35	900.53	307.23	100.03	60.10	212.57	76.00
7	1,134.57	153.14	86.09	5.73	2,023.06	930.73	862.62	294.30	95.82	57.57	203.62	72.80
8	1,288.63	173.94	97.78	6.51	2,297.75	1,057.10	862.62	294.30	95.82	57.57	203.62	72.80
9	1,442.68	194.73	109.47	7.29	2,572.45	1,183.48	862.62	294.30	95.82	57.57	203.62	72.80
10	1,596.73	215.53	121.16	8.07	2,847.14	1,309.85	862.62	294.30	95.82	57.57	203.62	72.80
11	1,750.78	236.32	132.85	8.85	3,121.83	1,436.23	862.62	294.30	95.82	57.57	203.62	72.80
12	1,904.84	257.11	144.54	9.63	3,396.52	1,562.60	862.62	294.30	95.82	57.57	203.62	72.80
13	2,058.89	277.91	156.23	10.40	3,671.22	1,688.98	862.62	294.30	95.82	57.57	203.62	72.80
14	2,212.94	298.70	167.92	11.18	3,945.91	1,815.35	862.62	294.30	95.82	57.57	203.62	72.80
15	2,367.00	319.50	179.61	11.96	4,220.60	1,941.73	862.62	294.30	95.82	57.57	203.62	72.80
16	2,521.05	340.29	191.29	12.74	4,495.29	2,068.10	862.62	294.30	95.82	57.57	203.62	72.80
17	2,666.64	359.94	202.34	13.48	4,754.89	2,187.53	815.22	278.13	90.55	54.41	192.43	68.80
18	2,802.07	378.22	212.62	14.16	4,996.38	2,298.63	758.34	258.72	84.24	50.61	179.01	64.00
19	2,929.04	395.36	222.25	14.80	5,222.77	2,402.79	710.95	242.55	78.97	47.45	167.82	60.00
20	3,039.07	410.21	230.60	15.36	5,418.98	2,493.06	616.15	210.21	68.44	41.12	145.44	52.00
21							258.78	88.29	28.75	17.27	61.09	21.84
22							0.00	0.00	0.00	0.00	0.00	0.00
23							0.00	0.00	0.00	0.00	0.00	0.00
24							0.00	0.00	0.00	0.00	0.00	0.00
25							0.00	0.00	0.00	0.00	0.00	0.00
26							0.00	0.00	0.00	0.00	0.00	0.00
27							0.00	0.00	0.00	0.00	0.00	0.00
28							0.00	0.00	0.00	0.00	0.00	0.00
29							0.00	0.00	0.00	0.00	0.00	0.00
30							0.00	0.00	0.00	0.00	0.00	0.00
31							0.00	0.00	0.00	0.00	0.00	0.00
32							0.00	0.00	0.00	0.00	0.00	0.00
33							0.00	0.00	0.00	0.00	0.00	0.00
34							0.00	0.00	0.00	0.00	0.00	0.00
35							0.00	0.00	0.00	0.00	0.00	0.00
36							0.00	0.00	0.00	0.00	0.00	0.00
37							0.00	0.00	0.00	0.00	0.00	0.00
38							0.00	0.00	0.00	0.00	0.00	0.00
39							0.00	0.00	0.00	0.00	0.00	0.00
40							0.00	0.00	0.00	0.00	0.00	0.00
	32,951	**4,448**	**2,500**	**167**	**58,755**	**27,031**	**17,276**	**5,894**	**1,919**	**1,153**	**4,078**	**1,458**

	Combined Construction & Operation and Maintenance Emissions					
	NOx	PM10	PM2.5	SO2	CO	VOCs
1	678.15	210.18	71.71	38.92	319.05	132.86
2	1,119.43	328.96	115.30	58.87	661.54	283.47
3	1,457.82	406.89	146.49	70.23	1,022.96	445.96
4	1,751.53	466.08	172.11	77.56	1,400.02	617.14
5	1,838.72	458.30	175.39	72.15	1,702.14	758.42
6	1,881.05	439.58	174.43	65.06	1,960.94	880.35
7	1,997.19	447.44	181.91	63.30	2,226.68	1,003.53
8	2,151.24	468.23	193.60	64.08	2,501.37	1,129.90
9	2,305.29	489.03	205.29	64.86	2,776.07	1,256.28
10	2,459.35	509.82	216.98	65.64	3,050.76	1,382.65
11	2,613.40	530.62	228.67	66.42	3,325.45	1,509.03
12	2,767.45	551.41	240.36	67.20	3,600.14	1,635.40
13	2,921.51	572.20	252.05	67.98	3,874.84	1,761.78
14	3,075.56	593.00	263.73	68.75	4,149.53	1,888.15
15	3,229.61	613.79	275.42	69.53	4,424.22	2,014.53
16	3,383.66	634.59	287.11	70.31	4,698.91	2,140.90
17	3,481.86	638.07	292.90	67.88	4,947.32	2,256.33
18	3,560.41	636.94	296.85	64.77	5,175.39	2,362.63
19	3,639.98	637.91	301.22	62.25	5,390.59	2,462.79
20	3,655.23	620.43	299.04	56.48	5,564.43	2,545.06
21	258.78	88.29	28.75	17.27	61.09	21.84
22	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00
32	0.00	0.00	0.00	0.00	0.00	0.00
33	0.00	0.00	0.00	0.00	0.00	0.00
34	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00
36	0.00	0.00	0.00	0.00	0.00	0.00
37	0.00	0.00	0.00	0.00	0.00	0.00
38	0.00	0.00	0.00	0.00	0.00	0.00
39	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00
	50,227	**10,342**	**4,419**	**1,320**	**62,833**	**28,489**

	Emission Factors per Well					
	NOx	PM10	PM2.5	SO2	CO	VOCs
Op	0.188096	0.025389	0.014273	0.000951	0.335395	0.154302
Con	0.947929	0.323402	0.105295	0.063265	0.223759	0.080000

A.4.5 Emission Points - Scenario 2

Scenario 2 - SEIS RFD Emission Points by Watershed for Construction Emissions (1.0 g NOx from Engines)										
					Construction Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Construction Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.9441365	45.17350559	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-108.9547988	45.02511074	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0888964	45.29528577	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0499645	45.44325647	CLARKS FORK YELLOWSTONE	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5441521	45.01011264	LITTLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.4367862	45.14408638	LITTLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.6163493	46.03435575	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2566985	45.82981624	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2689192	45.9319004	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2371025	45.91155283	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2876139	45.87320735	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.3704664	45.9433915	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.3833798	45.91986854	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.2206782	45.78953449	LOWER BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8950719	45.32372874	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1906473	45.04845919	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.127224	45.0482058	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0662494	45.0463265	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0192953	45.08316794	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0850023	45.08521834	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.150915	45.08390454	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2145762	45.08081906	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9627608	45.12005428	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1962674	45.11191918	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1351194	45.11174049	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0714183	45.11478024	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0125111	45.11626908	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8058573	45.39278421	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.000915	45.15088418	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0575099	45.14932839	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1091992	45.15092488	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1658912	45.1476511	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2270788	45.14781278	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.957088	45.15485509	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8427057	45.47897521	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7670751	45.58143586	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7724857	45.67659425	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7939829	45.78061951	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7968544	45.87902714	LOWER TONGUE	Custer	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8384004	45.56452059	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2169993	45.59975321	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1245521	45.72872913	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1463546	45.51900756	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9185693	45.75201292	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9469395	45.84556398	LOWER TONGUE	Custer	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1199013	45.82426101	LOWER TONGUE	Custer	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1862006	45.74380863	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1732814	45.41523309	LOWER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1353247	45.7765741	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1853627	45.84829915	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1159668	45.83910419	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9493448	45.79823964	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9102423	45.80233865	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9500425	45.73349506	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1777591	45.90447616	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9564803	45.82575858	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9837523	45.77697522	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9834606	45.81344396	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9801085	45.85184712	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.0672212	45.87672105	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.985258	45.73936775	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9950453	45.7146349	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9791728	45.89239879	LOWER YELLOWSTONE-SUNDAY	Treasure	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9482033	45.76730492	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.1261029	45.89324815	LOWER YELLOWSTONE-SUNDAY	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714

Scenario 2 - SEIS RFD Emission Points by Watershed for Construction Emissions (1.0 g NOx from Engines)										
					Construction Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Construction Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.1869611	46.42502531	MIDDLE MUSSELSHELL	Musselshell	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.1538128	45.00373939	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.0026151	45.00435919	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8748974	45.01191736	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7462246	45.01080066	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6336909	45.01434879	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5669066	45.06934218	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6792641	45.07010005	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6128423	45.3589134	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.9277779	45.07416887	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.8887584	45.1440493	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7869424	45.14067783	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6775808	45.13801376	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5802048	45.13566681	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5168432	45.22913207	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.4800443	45.18955626	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.5666423	45.17873365	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.6981156	45.1886391	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.4738774	45.26675596	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7368235	45.26935109	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.784381	45.31966458	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.703068	45.33537987	MIDDLE POWDER	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-105.7215527	45.46134361	MIZPAH	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9962867	45.33689316	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9325316	45.33710215	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9621328	45.30947587	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.994136	45.28023186	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9375915	45.27893984	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9579691	45.24610718	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.881452	45.71725511	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.757723	45.71928418	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6220247	45.72253455	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4959005	45.72421274	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3998157	45.78322101	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5306526	45.78510384	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6638756	45.78689404	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8020263	45.78531354	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3524423	45.8618565	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4549907	45.86135873	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5429837	45.86538099	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5608358	45.93247641	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4728256	45.92680484	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3890316	45.93117554	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.324293	45.93602503	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2782499	45.98802101	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3614704	45.99537505	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4453652	45.99102485	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5432926	45.99197974	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5908348	46.04152496	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4639721	46.04316764	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.37054	46.045603	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3032753	46.05037398	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3718811	46.10561053	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4461942	46.10431984	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5325503	46.10163267	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6275848	46.11575769	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5439175	46.1569001	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9475016	45.69484378	ROSEBUD	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4571953	46.16458578	ROSEBUD	Rosebud	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.7578172	45.44657007	STILLWATER	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-108.6823126	46.32003994	UPPER MUSSELSHELL	Musselshell	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714

Scenario 2 - SEIS RFD Emission Points by Watershed for Construction Emissions (1.0 g NOx from Engines)										
					Construction Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Construction Wells/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-106.8323923	45.00783236	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7903307	45.00602084	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9091138	45.05136249	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7465796	45.01595443	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7077379	45.03416601	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7475796	45.13008114	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6493939	45.093755	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6734747	45.07500148	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7245767	45.07472301	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6865526	45.05802281	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.594975	45.04699579	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8194467	45.02325601	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5316421	45.01038326	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4704863	45.05358034	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4096151	45.01018167	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8651889	45.25176775	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8654241	45.22344433	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.8622866	45.19582781	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7995346	45.25018769	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7985761	45.22419531	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.7965835	45.19660405	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.864485	45.0093902	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9621692	45.00774532	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.9790408	45.02701546	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6726239	45.00857642	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6092737	45.01086998	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.6399265	45.03636498	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.747682	45.09523907	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3608313	45.00959182	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3042044	45.01032764	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2121315	45.00998408	UPPER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.245271	45.03143069	UPPER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3293535	45.03623872	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.3869384	45.03866439	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5377621	45.04123955	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.4660257	45.01332086	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.5617171	45.0709975	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2852399	45.06959453	UPPER TONGUE	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-106.2467164	45.05477978	UPPER TONGUE	Powder River	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0890249	45.61690984	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0254773	45.5413516	UPPER YELLOWSTONE-LAKE BASIN	Carbon	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0528827	45.65712391	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0026382	45.62533653	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.1067798	45.69927346	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0037776	45.69442736	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0537864	45.72626256	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-109.0900954	45.76963276	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-108.3574854	46.19133291	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.8845271	46.21765128	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.222593	45.425538	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.278421	45.33934	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.251687	45.280535	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.17026	45.250393	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.159928	45.205637	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.234891	45.209166	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
-107.195872	45.13131	LITTLE BIGHORN	Big Horn	3.57	3.385459534	1.155007	0.376053	0.225946	0.799138	0.285714
			Totals	**650**	**616**	**210**	**68**	**41**	**145**	**52**

Scenario 2 - SEIS RFD Emission Points by Watershed for Operational Emissions (1.0 g NOx from Engines)											
					Operation Emissions per Point (tons)						
Longitude	Latitude	Watershed	County	Operational Well/point	NOx	PM10	PM2.5	SO2	CO	VOCs	
-108.9441365	45.17350559	CLARKS FORK YELLOWSTONE	Carbon	99.45	18.70587	2.524917	1.419384	0.094527	33.35451	15.34507	
-108.9547988	45.02511074	CLARKS FORK YELLOWSTONE	Carbon	100.35	18.87516	2.547768	1.432229	0.095382	33.65637	15.48394	
-109.0888964	45.29528577	CLARKS FORK YELLOWSTONE	Carbon	99.45	18.70587	2.524917	1.419384	0.094527	33.35451	15.34507	
-109.0499645	45.44325647	CLARKS FORK YELLOWSTONE	Carbon	100.35	18.87516	2.547768	1.432229	0.095382	33.65637	15.48394	
-105.5441521	45.01011264	LITTLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-105.4367862	45.14408638	LITTLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.6163493	46.03435575	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.2566985	45.82981624	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.2689192	45.9319004	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.2371025	45.91155283	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.2876139	45.87320735	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.3704664	45.9433915	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.3833798	45.91986854	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-107.2206782	45.78953449	LOWER BIGHORN	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-105.8950719	45.32372874	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.1906473	45.04845919	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.127224	45.0482058	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.0662494	45.0463265	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.0192953	45.08316794	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.0850023	45.08521834	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.150915	45.08390454	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.2145762	45.08081906	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-105.9627608	45.12005428	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.1962674	45.11191918	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-106.1351194	45.11174049	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.0714183	45.11478024	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-106.0125111	45.11626908	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-105.8058573	45.39278421	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-106.000915	45.15088418	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.0575099	45.14932839	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-106.1091992	45.15092488	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.1658912	45.1476511	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-106.2270788	45.14781278	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-105.957088	45.15485509	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-105.8427057	45.47897521	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-105.7670751	45.58143586	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-105.7724857	45.67659425	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-105.7939829	45.78061951	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-105.7968544	45.87902714	LOWER TONGUE	Custer	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-105.8384004	45.56452059	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.2169993	45.59975321	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-106.1245521	45.72872913	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.1463546	45.51900756	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-105.9185693	45.75201292	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-105.9469395	45.84556398	LOWER TONGUE	Custer	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-106.1199013	45.82426101	LOWER TONGUE	Custer	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786	
-106.1862006	45.74380863	LOWER TONGUE	Powder River	90.45	17.01301	2.296414	1.290931	0.085972	30.33595	13.95635	
-106.1732814	45.41523309	LOWER TONGUE	Powder River	89.55	16.84372	2.273564	1.278085	0.085117	30.0341	13.81748	
-107.1353247	45.7765741	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-107.1853627	45.84829915	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-107.1159668	45.83910419	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-106.9493448	45.79823964	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-106.9102423	45.80233865	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-106.9500425	45.73349506	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-107.1777591	45.90447616	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-106.9564803	45.82575858	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	17.35158	2.342115	1.316621	0.087683	30.93966	14.23409	
-106.9837523	45.77697522	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-106.9834606	45.81344396	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	17.35158	2.342115	1.316621	0.087683	30.93966	14.23409	
-106.9801085	45.85184712	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-107.0672212	45.87672105	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	17.35158	2.342115	1.316621	0.087683	30.93966	14.23409	
-106.985258	45.73936775	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-106.9950453	45.7146349	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	17.35158	2.342115	1.316621	0.087683	30.93966	14.23409	
-106.9791728	45.89239879	LOWER YELLOWSTONE-SUNDAY	Treasure	21.15	3.977928	0.53694	0.301841	0.020102	7.093058	3.26323	
-106.9482033	45.76730492	LOWER YELLOWSTONE-SUNDAY	Big Horn	93.15	17.52087	2.364965	1.329467	0.088539	31.24152	14.37296	
-107.1261029	45.89324815	LOWER YELLOWSTONE-SUNDAY	Big Horn	92.25	17.35158	2.342115	1.316621	0.087683	30.93966	14.23409	

Scenario 2 - SEIS RFD Emission Points by Watershed for Operational Emissions (1.0 g NOx from Engines)										
					Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Operational Well/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-108.1869611	46.42502531	MIDDLE MUSSELSHELL	Musselshell	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.1538128	45.00373939	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.0026151	45.00435919	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.8748974	45.01191736	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7462246	45.01080066	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6336909	45.01434879	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5669066	45.06934218	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6792641	45.07010005	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6128423	45.3589134	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.9277779	45.07416887	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.8887584	45.1440493	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7869424	45.14067783	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6775808	45.13801376	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5802048	45.13566681	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5168432	45.22913207	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.4800443	45.18955626	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.5666423	45.17873365	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.6981156	45.1886391	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.4738774	45.26675596	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7368235	45.26935109	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.784381	45.31966458	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.703068	45.33537987	MIDDLE POWDER	Powder River	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-105.7215527	45.46134361	MIZPAH	Powder River	111.15	20.9066	2.821971	1.586373	0.105648	37.27864	17.1504
-106.9962867	45.33689316	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9325316	45.33710215	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9621328	45.30947587	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.994136	45.28023186	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9375915	45.27893984	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9579691	45.24610718	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.881452	45.71725511	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.757723	45.71928418	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.6220247	45.72253455	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4959005	45.72421274	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3998157	45.78322101	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5306526	45.78510384	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.6638756	45.78689404	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.8020263	45.78531354	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3524423	45.8618565	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4549907	45.86135873	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5429837	45.86538099	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5608358	45.93247641	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4728256	45.92680484	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3890316	45.93117554	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.324293	45.93602503	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.2782499	45.98802101	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3614704	45.99537505	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4453652	45.99102485	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5432926	45.99197974	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5908348	46.04152496	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4639721	46.04316764	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.37054	46.045603	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3032753	46.05037398	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.3718811	46.10561053	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4461942	46.10431984	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5325503	46.10163267	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.6275848	46.11575769	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.5439175	46.1569001	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.9475016	45.69484378	ROSEBUD	Big Horn	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-106.4571953	46.16458578	ROSEBUD	Rosebud	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.7578172	45.44657007	STILLWATER	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-108.6823126	46.32003994	UPPER MUSSELSHELL	Musselshell	66.15	12.44226	1.679456	0.944107	0.062875	22.18585	10.20681

Scenario 2 - SEIS RFD Emission Points by Watershed for Operational Emissions (1.0 g NOx from Engines)										
					Operation Emissions per Point (tons)					
Longitude	Latitude	Watershed	County	Operational Well/point	NOx	PM10	PM2.5	SO2	CO	VOCs
-106.8323923	45.00783236	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.7903307	45.00602084	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.9091138	45.05136249	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.7465796	45.01595443	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7077379	45.03416601	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.7475796	45.13008114	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6493939	45.093755	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.6734747	45.07500148	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7245767	45.07472301	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.6865526	45.05802281	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.594975	45.04699579	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.8194467	45.02325601	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.5316421	45.01038326	UPPER TONGUE	Big Horn	86.12	16.19913	2.186557	1.229174	0.08186	28.88472	13.2887
-106.4704863	45.05358034	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.4096151	45.01018167	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.8651889	45.25176775	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.8654241	45.22344433	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.8622866	45.19582781	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7995346	45.25018769	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7985761	45.22419531	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.7965835	45.19660405	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.864485	45.0093902	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.9621692	45.00774532	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.9790408	45.02701546	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6726239	45.00857642	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6092737	45.01086998	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.6399265	45.03636498	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.747682	45.09523907	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.3608313	45.00959182	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.3042044	45.01032764	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.2121315	45.00998408	UPPER TONGUE	Powder River	87.02	16.36841	2.209407	1.24202	0.082715	29.18658	13.42757
-106.245271	45.03143069	UPPER TONGUE	Powder River	87.02	16.36841	2.209407	1.24202	0.082715	29.18658	13.42757
-106.3293535	45.03623872	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.3869384	45.03866439	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.5377621	45.04123955	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.4660257	45.01332086	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.5617171	45.0709975	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.2852399	45.06959453	UPPER TONGUE	Big Horn	85.22	16.02984	2.163707	1.216329	0.081004	28.58287	13.14982
-106.2467164	45.05477978	UPPER TONGUE	Powder River	87.02	16.36841	2.209407	1.24202	0.082715	29.18658	13.42757
-109.0890249	45.61690984	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0254773	45.5413516	UPPER YELLOWSTONE-LAKE BASIN	Carbon	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0528827	45.65712391	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0026382	45.62533653	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.1067798	45.69927346	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0037776	45.69442736	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0537864	45.72626256	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-109.0900954	45.76963276	UPPER YELLOWSTONE-LAKE BASIN	Stillwater	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-108.3574854	46.19133291	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-107.8845271	46.21765128	UPPER YELLOWSTONE-POMPEYS PILLAR	Yellowstone	88.65	16.67443	2.250713	1.26524	0.084261	29.73224	13.6786
-107.222593	45.425538	LITTLE BIGHORN	Big Horn	97.71	18.3797	2.480891	1.394634	0.092879	32.77291	15.0775
-107.278421	45.33934	LITTLE BIGHORN	Big Horn	95.91	18.04113	2.43519	1.368944	0.091168	32.1692	14.79975
-107.251687	45.280535	LITTLE BIGHORN	Big Horn	95.91	18.04113	2.43519	1.368944	0.091168	32.1692	14.79975
-107.17026	45.250393	LITTLE BIGHORN	Big Horn	95.91	18.04113	2.43519	1.368944	0.091168	32.1692	14.79975
-107.159928	45.205637	LITTLE BIGHORN	Big Horn	95.91	18.04113	2.43519	1.368944	0.091168	32.1692	14.79975
-107.234891	45.209166	LITTLE BIGHORN	Big Horn	95.91	18.04113	2.43519	1.368944	0.091168	32.1692	14.79975
-107.195872	45.13131	LITTLE BIGHORN	Big Horn	97.71	18.3797	2.480891	1.394634	0.092879	32.77291	15.0775
			Totals	**16,157**	**3,039**	**410**	**231**	**15**	**5,419**	**2,493**

MILES CITY FIELD OFFICE

Supplemental Air Quality Analysis

APPENDIX B
DATA SET-UP

Appendix B CALMET User-Defined Fields

Variable	Description	Value
PMAP	Map projection	LCC(Lambert Conformal) False Easting = 0.0 False Northing = 0.0 DATUM = WGS-84 *Reference Lat/Long:* RLAT0 = 44.75 N RLON0 = 107.00 W *Standard Parallels:* XLAT1 = 30.0 N XLAT2 = 60.0 N
NX, NY	No. X grid cells, No. Y grid cells	210, 180
DGRIDKM	Grid spacing (km)	4.0
XORIGKM	SOUTHWEST corner of grid cell (1,1) (km)	-420.0
YORIGKM	SOUTHWEST corner of grid cell (1,1) (km)	-360.0
NZ	Number of vertical layers	12
ZFACE	Vertical cell face heights (m)	0, 20, 40, 80, 120, 180, 260, 400, 600, 800, 1200, 2000, 3000
IEXTRP	Extrapolation of surface winds to upper layers	-4
RMAX1	Max surface over-land extrapolation radius (km)	20
RMAX2	Max aloft over-land extrapolation radius (km)	50
RMAX3	Maximum over-water extrapolation radius (km)	500
TERRAD	Radius of influence of terrain features (km)	10
R1	Relative weight at surface of Step 1 field and obs	10
R2	Relative weight aloft of Step 1 field and obs	25
ISURFT	Surface Station to use for surface temperature	Riverton Mun. Arpt, WY
IUPT	Station for lapse rates	Riverton, WY
IPROG	Gridded prognostic wind field – MM4/MM5 data	14

CALPUFF User-Defined Fields

Variable	Description	Value
NSPEC	Number of chemical species	9
NSE	Number of chemical species to be emitted	7
CSPECn	Names of Species	SO_2, SO_4, NO_X, HNO_3, NO_3, PM_{10}, $PM_{2.5}$, EC, SOA
MCHEM	Chemical mechanism flag	1
MDISP	Method used to compute dispersion coefficients	3
PMAP	Map projection	same as CALMET
NX, NY	No. X grid cells, No. Y grid cells	210, 180
DGRIDKM	Grid spacing (km)	4.0
XORIGKM	SOUTHWEST corner of grid cell (1,1) (km)	-420.0
YORIGKM	SOUTHWEST corner of grid cell (1,1) (km)	-360.0
NZ	Number of vertical layers	12
ZFACE	Vertical cell face heights (m)	0, 20, 40, 80, 120, 180, 260, 400, 600, 800, 1200, 2000, 3000
IBCOMP	Southwest X-index of computational domain	1
JBCOMP	Southwest J-index of computational domain	1
IECOMP	Northeast X-index of computational domain	210
JECOMP	Northeast Y-index of computational domain	180
Dry Gas Dep	Chemical parameters of gaseous deposition	CALPUFF default
Dry Part. Dep	Chemical parameters of particle deposition	CALPUFF default
Wet Dep	Wet deposition parameters	CALPUFF default
MOZ	Ozone data input option	1
BCKO3	Monthly ozone concentrations (Used only if MCHEM = 1, 3, or 4 and MOZ = 0 or MOZ = 1 and all hourly O3 data missing) (ppb)	12*40.0
BCKNH3	Monthly ammonia concentrations (ppb)	12*5.0

MILES CITY FIELD OFFICE

Supplemental Air Quality Analysis

APPENDIX C
MODEL OUTPUT

APPENDIX C

List of Tables

Table C-1: Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Table C-2: Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised – Scenario 1

Table C-3: Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Table C-4: Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised – Scenario 2

Table C-5: Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised – Scenario 2A

Table C-6: Modeled Deposition for Nitrogen and Sulfur – Alternative H Revised

Table C-7: Modeled Deposition for Nitrogen and Sulfur - Alternative H Revised - Scenario 1A

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Table C-9: Visibility - Method 2 EPA f(RH) values, 95% RHMAX FLAG Background - Alternative H Revised

Table C-10: Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised

Table C-11: Visibility - Method 2 EPA f(RH) values, 95% RHMAX FLAG Background - Alternative H Revised – Scenario 1

Table C-12: Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised - Scenario 1

Table C-13: Visibility - Method 2 EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised – Scenario 1A

Table C-14: Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised - Scenario 1A

Table C-15: Visibility -Method 2 EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised – Scenario 2

Table C-16: Visibility -Method 6 and Monthly f(RH) values - Alternative H Revised - Scenario 2

Table C-17: Visibility -Method 2 EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised – Scenario 2A

Table C-18: Visibility -Method 6 and Monthly f(RH) Values - Alternative H Revised - Scenario 2A

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Notes:
(1) Bold type indicate a modeled impact that is above the NAAQS/SAAQS
(2) Includes 75% NOx to NO2 conversion
* Area's modeled impacts have excluded receptors within 1-km of a MT CBNG or MTOG Alternative H source

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
NEAR FIELD RECEPTORS												
Montana Near Field Receptors*	NO_2	1-Hr	1ST HIGH	3.31E+01	3.21E+02	5.39E+02	5.29E+01	2.30E+00	1.30E-01	5.40E+02	5.40E+02	565
		ANNUAL	1ST HIGH	2.41E-01	2.16E+00	1.58E+00	4.57E-01	1.34E-02	5.22E-04	2.69E+00	3.50E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	1.13E+00	3.20E+00	5.81E+00	6.67E-01	1.62E-01	4.80E-03	4.68E+01	4.69E+01	150
		ANNUAL	1ST HIGH	1.81E-01	4.63E-01	4.92E-01	9.27E-02	1.87E-02	3.74E-04	2.66E+00	2.88E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.68E-01	1.81E+00	2.16E+00	2.68E-01	3.24E-02	3.11E-03	3.41E+00	7.01E+00	35
		ANNUAL	1ST HIGH	5.23E-02	2.46E-01	2.21E-01	3.67E-02	3.89E-03	1.86E-04	4.92E-01	8.92E-01	15
	SO_2	1-Hr	1ST HIGH	3.18E+00	9.09E-01	8.22E+00	8.40E+00	2.31E-01	2.56E-02	1.40E+02	1.40E+02	1,300
		3- Hr	2ND HIGH	9.42E-01	2.69E-01	1.72E+00	3.36E+00	7.27E-02	1.05E-02	4.38E+01	4.39E+01	1,300
		24- Hr	2ND HIGH	1.63E-01	4.67E-02	3.39E-01	5.72E-01	1.12E-02	1.27E-03	1.51E+01	1.51E+01	260
		ANNUAL	1ST HIGH	2.41E-02	6.90E-03	2.48E-02	7.62E-02	7.03E-04	1.06E-04	1.63E+00	1.79E+00	60
Wyoming Near Field Receptors	NO_2	ANNUAL	1ST HIGH	4.84E-02	4.51E-01	2.52E-01	1.18E-02	7.39E-04	3.39E-04	6.15E-01	4.07E+01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.84E-01	1.09E+00	1.49E+00	4.41E-02	3.87E-02	5.47E-03	3.02E+00	1.06E+02	150
		ANNUAL	1ST HIGH	4.70E-02	1.49E-01	1.28E-01	5.45E-03	1.52E-03	3.84E-04	4.94E-01	1.91E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.28E-01	8.61E-01	1.07E+00	2.94E-02	1.14E-02	3.89E-03	2.39E+00	1.18E+01	35
		ANNUAL	1ST HIGH	1.70E-02	1.01E-01	7.51E-02	3.53E-03	3.86E-04	2.34E-04	3.08E-01	2.78E+00	15
	SO_2	3- Hr	2ND HIGH	1.46E-01	4.18E-02	1.32E-01	1.11E-01	5.78E-03	2.52E-03	6.71E+00	5.52E+02	1,300
		24- Hr	2ND HIGH	3.17E-02	9.06E-03	3.31E-02	1.82E-02	1.88E-03	6.46E-04	1.84E+00	1.24E+02	260
		ANNUAL	1ST HIGH	5.29E-03	1.52E-03	4.43E-03	2.32E-03	1.00E-04	7.98E-05	2.11E-01	1.72E+01	60
CLASS I AREAS												
Badlands NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.26E-04	2.13E-03	1.01E-03	1.48E-04	1.10E-05	2.84E-06	9.47E-03	1.32E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.34E-02	8.45E-02	5.25E-02	5.99E-03	9.94E-04	2.93E-04	7.82E-01	4.18E+00	150
		ANNUAL	1ST HIGH	1.66E-03	8.86E-03	5.02E-03	6.97E-04	1.04E-04	2.18E-05	9.68E-02	6.21E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.91E-03	7.86E-02	4.50E-02	5.29E-03	4.67E-04	2.43E-04	6.86E-01	3.52E+00	35
		ANNUAL	1ST HIGH	1.02E-03	7.76E-03	4.09E-03	5.96E-04	4.59E-05	1.66E-05	7.76E-02	4.34E-01	15
	SO_2	3- Hr	2ND HIGH	1.62E-03	4.86E-04	1.52E-03	1.75E-03	8.81E-05	6.13E-05	1.05E+00	8.51E+00	1,300
		24- Hr	2ND HIGH	5.35E-04	1.54E-04	4.54E-04	6.95E-04	3.98E-05	2.15E-05	3.30E-01	2.52E+00	260
		ANNUAL	1ST HIGH	9.56E-05	2.80E-05	6.98E-05	1.08E-04	4.14E-06	2.51E-06	5.55E-02	4.43E-01	60
Bob Marshall W Class I Area	NO_2	1-Hr	1ST HIGH	6.64E-04	6.38E-03	6.44E-03	1.48E-03	2.43E-05	4.87E-05	4.63E+00	4.63E+00	565
		ANNUAL	1ST HIGH	4.96E-07	4.75E-06	3.16E-06	2.33E-06	3.87E-08	1.23E-08	1.53E-02	1.53E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.10E-03	1.58E-02	1.25E-02	3.39E-03	3.21E-04	4.22E-05	1.44E+00	1.49E+00	150
		ANNUAL	1ST HIGH	8.62E-05	4.65E-04	2.78E-04	1.13E-04	9.30E-06	1.25E-06	6.31E-02	8.00E-02	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.90E-03	1.45E-02	1.00E-02	3.00E-03	1.20E-04	3.54E-05	8.61E-01	1.12E+00	35
		ANNUAL	1ST HIGH	5.58E-05	4.12E-04	2.30E-04	9.77E-05	4.36E-06	9.32E-07	4.20E-02	5.65E-02	15
	SO_2	1-Hr	1ST HIGH	7.53E-04	2.22E-04	7.35E-04	9.65E-04	3.72E-05	2.57E-05	4.20E+00	4.20E+00	1,300
		3- Hr	2ND HIGH	3.32E-04	9.83E-05	4.06E-04	8.56E-04	2.07E-05	1.58E-05	3.30E+00	3.30E+00	1,300
		24- Hr	2ND HIGH	1.70E-04	4.99E-05	1.52E-04	3.70E-04	8.17E-06	6.50E-06	6.19E-01	1.17E+00	260
		ANNUAL	1ST HIGH	3.97E-06	1.18E-06	3.10E-06	1.36E-05	2.60E-07	1.34E-07	3.85E-02	4.76E-02	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Bridger W Class I Area	NO_2	ANNUAL	1ST HIGH	2.33E-05	2.23E-04	1.14E-04	2.68E-05	1.42E-06	4.24E-07	3.32E-03	9.84E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.54E-02	1.43E-01	5.40E-02	1.14E-02	1.16E-03	2.92E-04	1.34E+00	7.21E+00	150
		ANNUAL	1ST HIGH	6.15E-04	3.52E-03	1.78E-03	4.15E-04	4.51E-05	1.01E-05	5.70E-02	5.21E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.67E-02	1.28E-01	4.58E-02	1.02E-02	6.35E-04	2.39E-04	1.14E+00	5.84E+00	35
		ANNUAL	1ST HIGH	4.09E-04	3.16E-03	1.50E-03	3.68E-04	2.26E-05	8.03E-06	4.95E-02	4.11E-01	15
	SO_2	3- Hr	2ND HIGH	3.07E-03	9.11E-04	4.26E-03	2.91E-03	7.36E-05	1.03E-04	1.96E+00	9.96E+00	1,300
		24- Hr	2ND HIGH	8.35E-04	2.42E-04	5.73E-04	1.03E-03	2.71E-05	2.58E-05	7.57E-01	4.39E+00	260
		ANNUAL	1ST HIGH	2.74E-05	8.25E-06	1.86E-05	4.73E-05	1.26E-06	9.72E-07	2.80E-02	4.37E-01	60
Fitzpatrick W Class I Area	NO_2	ANNUAL	1ST HIGH	2.17E-05	2.12E-04	9.16E-05	5.21E-05	2.77E-06	2.83E-07	3.65E-03	1.62E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.40E-02	1.40E-01	5.76E-02	1.49E-02	1.59E-03	2.21E-04	1.57E+00	6.82E+00	150
		ANNUAL	1ST HIGH	6.14E-04	3.57E-03	1.75E-03	5.91E-04	6.48E-05	1.03E-05	6.82E-02	3.89E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.61E-02	1.26E-01	4.92E-02	1.33E-02	8.01E-04	1.82E-04	1.30E+00	5.89E+00	35
		ANNUAL	1ST HIGH	4.12E-04	3.22E-03	1.49E-03	5.22E-04	3.22E-05	8.22E-06	5.96E-02	3.21E-01	15
	SO_2	3- Hr	2ND HIGH	2.73E-03	8.13E-04	4.01E-03	4.21E-03	1.06E-04	9.96E-05	3.36E+00	1.14E+01	1,300
		24- Hr	2ND HIGH	7.59E-04	2.30E-04	3.89E-04	1.45E-03	3.88E-05	2.04E-05	1.16E+00	4.16E+00	260
		ANNUAL	1ST HIGH	2.58E-05	7.95E-06	1.69E-05	6.86E-05	1.79E-06	8.95E-07	3.73E-02	2.62E-01	60
Fort Peck IR Class I Area	NO_2	1-Hr	1ST HIGH	5.32E-02	4.94E-01	3.12E-01	3.41E-02	1.16E-03	1.05E-03	1.42E+00	7.85E+00	565
		ANNUAL	1ST HIGH	2.53E-04	2.39E-03	8.50E-04	5.12E-04	2.24E-05	2.31E-06	2.78E-02	7.83E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.81E-02	1.36E-01	8.57E-02	1.37E-02	1.34E-03	3.63E-04	9.21E-01	3.84E+00	150
		ANNUAL	1ST HIGH	1.33E-03	6.74E-03	3.32E-03	1.24E-03	1.43E-04	1.24E-05	1.25E-01	2.86E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.55E-02	1.15E-01	7.04E-02	1.15E-02	6.25E-04	2.80E-04	6.63E-01	3.32E+00	35
		ANNUAL	1ST HIGH	7.72E-04	5.77E-03	2.61E-03	1.03E-03	5.80E-05	9.09E-06	8.20E-02	2.10E-01	15
	SO_2	1-Hr	1ST HIGH	6.89E-03	1.97E-03	6.91E-03	7.98E-03	1.39E-04	2.11E-04	3.65E+00	2.41E+01	1,300
		3- Hr	2ND HIGH	3.60E-03	1.03E-03	4.33E-03	5.37E-03	1.10E-04	1.61E-04	2.14E+00	1.83E+01	1,300
		24- Hr	2ND HIGH	1.31E-03	3.83E-04	9.38E-04	2.37E-03	4.50E-05	3.92E-05	6.34E-01	7.01E+00	260
		ANNUAL	1ST HIGH	7.61E-05	2.21E-05	4.70E-05	2.16E-04	5.16E-06	1.52E-06	7.94E-02	3.18E-01	60
Gates of the Mountain W Class I Area	NO_2	1-Hr	1ST HIGH	1.20E-03	1.16E-02	1.02E-02	9.22E-03	1.47E-04	6.11E-05	7.12E+00	7.12E+00	565
		ANNUAL	1ST HIGH	4.44E-06	4.24E-05	9.29E-06	2.81E-05	5.42E-07	2.84E-08	7.10E-02	7.13E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.97E-03	5.36E-02	3.11E-02	1.48E-02	9.95E-04	1.10E-04	2.69E+00	2.92E+00	150
		ANNUAL	1ST HIGH	2.55E-04	1.43E-03	6.94E-04	4.11E-04	3.03E-05	3.01E-06	1.84E-01	2.24E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.35E-03	4.91E-02	2.75E-02	1.31E-02	5.07E-04	8.84E-05	1.95E+00	2.29E+00	35
		ANNUAL	1ST HIGH	1.68E-04	1.28E-03	5.85E-04	3.57E-04	1.46E-05	2.35E-06	1.20E-01	1.55E-01	15
	SO_2	1-Hr	1ST HIGH	8.23E-04	2.44E-04	9.11E-04	3.70E-03	5.61E-05	3.97E-05	4.28E+00	4.30E+00	1,300
		3- Hr	2ND HIGH	6.16E-04	1.90E-04	5.65E-04	3.03E-03	5.00E-05	1.92E-05	3.47E+00	3.47E+00	1,300
		24- Hr	2ND HIGH	2.97E-04	8.86E-05	2.52E-04	1.50E-03	2.56E-05	8.26E-06	1.65E+00	1.67E+00	260
		ANNUAL	1ST HIGH	1.14E-05	3.37E-06	6.96E-06	5.14E-05	8.64E-07	2.85E-07	1.19E-01	1.42E-01	60
Grand Teton NP Class I Area	NO_2	ANNUAL	1ST HIGH	4.05E-06	3.92E-05	1.58E-05	1.07E-05	5.19E-07	5.94E-08	1.13E-02	3.55E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.03E-02	5.99E-02	3.17E-02	5.40E-03	6.46E-04	1.42E-04	7.47E-01	4.07E+00	150
		ANNUAL	1ST HIGH	2.78E-04	1.64E-03	8.87E-04	2.21E-04	2.22E-05	4.33E-06	4.46E-02	2.96E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	7.01E-03	5.42E-02	2.71E-02	4.81E-03	3.32E-04	1.18E-04	6.95E-01	3.37E+00	35
		ANNUAL	1ST HIGH	1.92E-04	1.49E-03	7.62E-04	1.97E-04	1.14E-05	3.51E-06	4.01E-02	2.27E-01	15
	SO_2	3- Hr	2ND HIGH	9.77E-04	2.86E-04	8.61E-04	1.34E-03	3.30E-05	3.42E-05	2.12E+00	5.97E+00	1,300
		24- Hr	2ND HIGH	2.70E-04	8.11E-05	2.39E-04	4.74E-04	1.33E-05	1.18E-05	5.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	1.02E-05	3.08E-06	7.16E-06	2.28E-05	5.87E-07	3.53E-07	2.36E-02	2.92E-01	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
North Absaorka W Class I Area	NO_2	ANNUAL	1ST HIGH	1.19E-04	1.20E-03	2.24E-04	7.47E-04	3.98E-05	6.04E-07	2.23E-02	2.81E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.36E-02	2.00E-01	1.47E-01	3.99E-02	5.97E-03	4.25E-04	1.83E+00	6.66E+00	150
		ANNUAL	1ST HIGH	1.32E-03	7.49E-03	3.61E-03	2.11E-03	2.89E-04	1.61E-05	1.46E-01	3.54E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.26E-02	1.80E-01	1.25E-01	3.40E-02	2.44E-03	3.32E-04	1.50E+00	5.44E+00	35
		ANNUAL	1ST HIGH	8.43E-04	6.63E-03	3.03E-03	1.77E-03	1.23E-04	1.26E-05	1.21E-01	2.96E-01	15
	SO_2	3- Hr	2ND HIGH	2.88E-03	8.63E-04	3.38E-03	1.43E-02	3.97E-04	9.47E-05	5.23E+00	7.73E+00	1,300
		24- Hr	2ND HIGH	1.30E-03	3.93E-04	1.26E-03	5.08E-03	1.52E-04	3.82E-05	1.86E+00	3.47E+00	260
		ANNUAL	1ST HIGH	6.29E-05	2.03E-05	3.62E-05	3.50E-04	9.15E-06	1.50E-06	1.09E-01	2.31E-01	60
North Cheyenne IR Class I Area*	NO_2	1-Hr	1ST HIGH	1.22E+01	1.12E+02	4.28E+02	5.08E-01	6.80E-02	2.68E+00	4.28E+02	4.28E+02	565
		ANNUAL	1ST HIGH	6.27E-02	5.86E-01	1.63E+00	3.58E-03	2.11E-04	1.71E-02	2.19E+00	2.27E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	4.29E-01	1.12E+00	3.92E+00	2.24E-02	7.74E-03	6.24E-02	4.69E+00	8.46E+00	150
		ANNUAL	1ST HIGH	5.28E-02	1.50E-01	4.76E-01	3.25E-03	6.23E-04	6.41E-03	9.02E-01	1.32E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.23E-01	6.33E-01	1.72E+00	1.73E-02	1.74E-03	1.69E-02	3.16E+00	6.02E+00	35
		ANNUAL	1ST HIGH	1.66E-02	8.74E-02	1.98E-01	2.44E-03	1.93E-04	1.83E-03	4.41E-01	7.18E-01	15
	SO_2	1-Hr	1ST HIGH	1.17E+00	3.34E-01	6.55E+00	8.80E-02	8.00E-03	4.63E-01	3.07E+01	3.07E+01	1,300
		3- Hr	2ND HIGH	3.83E-01	1.09E-01	1.67E+00	3.98E-02	3.62E-03	2.17E-01	8.55E+00	1.05E+01	1,300
		24- Hr	2ND HIGH	5.78E-02	1.65E-02	2.29E-01	6.13E-03	5.26E-04	2.81E-02	2.73E+00	4.70E+00	260
		ANNUAL	1ST HIGH	6.47E-03	1.88E-03	2.55E-02	8.64E-04	3.22E-05	3.00E-03	4.68E-01	7.22E-01	60
Red Rock Lakes Class I Area	NO_2	1-Hr	1ST HIGH	1.49E-03	1.38E-02	7.30E-04	2.34E-03	8.34E-05	2.07E-05	6.14E+00	6.14E+00	565
		ANNUAL	1ST HIGH	3.26E-06	3.13E-05	2.82E-06	7.09E-06	2.00E-07	2.36E-08	2.45E-02	3.00E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.20E-03	3.16E-02	1.70E-02	5.19E-03	5.76E-04	1.01E-04	6.32E-01	1.76E+00	150
		ANNUAL	1ST HIGH	1.71E-04	1.00E-03	5.01E-04	1.63E-04	1.29E-05	2.37E-06	5.50E-02	1.38E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.70E-03	2.90E-02	1.44E-02	4.69E-03	3.07E-04	7.93E-05	5.83E-01	1.53E+00	35
		ANNUAL	1ST HIGH	1.18E-04	9.12E-04	4.30E-04	1.45E-04	6.69E-06	1.92E-06	4.73E-02	1.13E-01	15
	SO_2	1-Hr	1ST HIGH	5.67E-04	1.69E-04	3.54E-04	1.62E-03	4.60E-05	2.60E-05	4.98E+00	4.98E+00	1,300
		3- Hr	2ND HIGH	4.91E-04	1.44E-04	3.00E-04	1.19E-03	3.68E-05	1.67E-05	2.56E+00	3.23E+00	1,300
		24- Hr	2ND HIGH	1.80E-04	5.59E-05	1.41E-04	3.82E-04	1.19E-05	6.48E-06	7.30E-01	1.10E+00	260
		ANNUAL	1ST HIGH	6.25E-06	1.87E-06	3.82E-06	1.63E-05	3.32E-07	1.84E-07	3.98E-02	9.60E-02	60
Scapegoat W Class I Area	NO_2	1-Hr	1ST HIGH	1.03E-03	1.00E-02	8.44E-03	2.77E-03	8.00E-05	5.71E-05	3.19E+00	3.19E+00	565
		ANNUAL	1ST HIGH	1.62E-06	1.54E-05	5.66E-06	8.13E-06	1.73E-07	1.84E-08	2.32E-02	2.34E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.52E-03	3.29E-02	2.08E-02	6.16E-03	4.44E-04	7.28E-05	2.78E+00	2.82E+00	150
		ANNUAL	1ST HIGH	1.61E-04	8.91E-04	4.75E-04	2.43E-04	1.83E-05	2.12E-06	1.17E-01	1.47E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.92E-03	3.01E-02	1.84E-02	5.50E-03	2.29E-04	5.62E-05	1.91E+00	1.91E+00	35
		ANNUAL	1ST HIGH	1.06E-04	7.95E-04	3.98E-04	2.12E-04	8.81E-06	1.62E-06	7.92E-02	1.05E-01	15
	SO_2	1-Hr	1ST HIGH	6.35E-04	1.98E-04	7.65E-04	1.71E-03	3.42E-05	4.44E-05	3.48E+00	4.74E+00	1,300
		3- Hr	2ND HIGH	4.92E-04	1.45E-04	5.00E-04	1.38E-03	2.62E-05	1.92E-05	2.69E+00	2.72E+00	1,300
		24- Hr	2ND HIGH	2.47E-04	7.28E-05	1.86E-04	7.20E-04	1.22E-05	9.12E-06	1.30E+00	1.43E+00	260
		ANNUAL	1ST HIGH	7.23E-06	2.15E-06	4.89E-06	2.93E-05	5.16E-07	2.15E-07	6.57E-02	8.27E-02	60
Teton W Class I Area	NO_2	ANNUAL	1ST HIGH	2.27E-05	2.27E-04	4.14E-05	1.05E-04	5.78E-06	1.69E-07	7.71E-03	2.23E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	1.16E-01	6.45E-02	2.25E-02	2.82E-03	3.10E-04	1.55E+00	4.71E+00	150
		ANNUAL	1ST HIGH	6.09E-04	3.53E-03	1.73E-03	7.28E-04	8.46E-05	9.00E-06	7.89E-02	2.79E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	1.06E-01	5.33E-02	1.95E-02	1.33E-03	2.52E-04	1.30E+00	4.00E+00	35
		ANNUAL	1ST HIGH	4.05E-04	3.17E-03	1.46E-03	6.34E-04	4.04E-05	7.18E-06	6.81E-02	2.35E-01	15
	SO_2	3- Hr	2ND HIGH	1.43E-03	4.33E-04	1.71E-03	9.01E-03	2.27E-04	5.11E-05	2.91E+00	5.92E+00	1,300
		24- Hr	2ND HIGH	6.61E-04	2.12E-04	6.03E-04	2.75E-03	7.61E-05	1.84E-05	1.07E+00	2.55E+00	260
		ANNUAL	1ST HIGH	2.48E-05	7.79E-06	1.55E-05	9.08E-05	2.36E-06	7.49E-07	4.53E-02	1.98E-01	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Theodore Roosevelt NP Class I Area	NO_2	ANNUAL	1ST HIGH	3.96E-04	3.73E-03	1.83E-03	2.99E-04	2.04E-05	4.47E-06	3.03E-02	6.00E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.71E-02	1.63E-01	1.16E-01	2.05E-02	1.79E-03	3.76E-04	1.69E+00	5.67E+00	150
		ANNUAL	1ST HIGH	1.90E-03	9.79E-03	5.89E-03	9.78E-04	1.34E-04	2.26E-05	1.37E-01	4.50E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.85E-02	1.48E-01	9.17E-02	1.84E-02	9.35E-04	2.95E-04	1.34E+00	4.76E+00	35
		ANNUAL	1ST HIGH	1.12E-03	8.43E-03	4.69E-03	8.27E-04	5.58E-05	1.67E-05	9.85E-02	3.37E-01	15
	SO_2	3- Hr	2ND HIGH	2.51E-03	7.22E-04	2.39E-03	2.74E-03	1.25E-04	1.26E-04	2.14E+00	3.66E+01	1,300
		24- Hr	2ND HIGH	1.04E-03	3.03E-04	1.26E-03	1.44E-03	4.77E-05	4.46E-05	1.05E+00	1.09E+01	260
		ANNUAL	1ST HIGH	1.13E-04	3.29E-05	8.50E-05	1.61E-04	5.16E-06	2.81E-06	1.07E-01	8.20E-01	60
UL Bend W Class I Area	NO_2	1-Hr	1ST HIGH	2.42E-02	2.25E-01	1.59E-01	1.08E-01	5.54E-03	3.21E-04	2.30E+00	2.30E+00	565
		ANNUAL	1ST HIGH	1.73E-04	1.62E-03	3.92E-04	1.54E-03	7.16E-05	7.48E-07	5.79E-02	6.29E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.09E-02	1.19E-01	6.82E-02	2.38E-02	2.77E-03	2.03E-04	1.38E+00	2.55E+00	150
		ANNUAL	1ST HIGH	1.10E-03	5.24E-03	2.55E-03	2.01E-03	2.86E-04	9.13E-06	1.88E-01	2.89E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.35E-02	1.06E-01	5.70E-02	1.98E-02	1.24E-03	1.54E-04	1.15E+00	2.36E+00	35
		ANNUAL	1ST HIGH	6.09E-04	4.39E-03	1.96E-03	1.57E-03	1.01E-04	6.36E-06	1.20E-01	1.99E-01	15
	SO_2	1-Hr	1ST HIGH	4.23E-03	1.23E-03	5.60E-03	2.15E-02	5.59E-04	1.42E-04	3.68E+00	1.01E+01	1,300
		3- Hr	2ND HIGH	3.39E-03	9.75E-04	3.43E-03	1.34E-02	2.89E-04	1.17E-04	2.44E+00	5.60E+00	1,300
		24- Hr	2ND HIGH	1.19E-03	3.42E-04	8.88E-04	4.56E-03	1.20E-04	3.12E-05	9.17E-01	2.08E+00	260
		ANNUAL	1ST HIGH	6.99E-05	2.03E-05	4.07E-05	4.74E-04	1.17E-05	1.23E-06	1.35E-01	2.08E-01	60
Washakie W Class I Area	NO_2	ANNUAL	1ST HIGH	9.28E-05	9.41E-04	1.15E-04	5.68E-04	3.18E-05	6.23E-07	1.58E-02	2.51E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.18E-02	1.87E-01	1.05E-01	3.69E-02	4.93E-03	4.76E-04	2.19E+00	6.91E+00	150
		ANNUAL	1ST HIGH	1.12E-03	6.40E-03	2.81E-03	1.87E-03	2.53E-04	1.89E-05	1.29E-01	4.21E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.07E-02	1.67E-01	8.86E-02	3.14E-02	2.18E-03	3.85E-04	1.96E+00	5.80E+00	35
		ANNUAL	1ST HIGH	7.19E-04	5.68E-03	2.37E-03	1.57E-03	1.10E-04	1.49E-05	1.09E-01	3.53E-01	15
	SO_2	3- Hr	2ND HIGH	3.23E-03	1.03E-03	2.73E-03	1.95E-02	5.20E-04	1.32E-04	6.75E+00	9.41E+00	1,300
		24- Hr	2ND HIGH	1.17E-03	3.66E-04	9.85E-04	5.42E-03	1.48E-04	3.70E-05	2.19E+00	3.88E+00	260
		ANNUAL	1ST HIGH	5.18E-05	1.70E-05	2.69E-05	2.93E-04	7.80E-06	1.71E-06	9.57E-02	2.77E-01	60
Wind Cave NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.48E-04	2.33E-03	1.17E-03	1.12E-04	7.64E-06	3.13E-06	9.39E-03	1.82E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.00E-02	1.19E-01	6.56E-02	7.64E-03	9.60E-04	3.52E-04	8.34E-01	7.04E+00	150
		ANNUAL	1ST HIGH	1.99E-03	1.09E-02	6.25E-03	7.68E-04	1.03E-04	2.62E-05	1.11E-01	8.72E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	1.08E-01	5.66E-02	6.70E-03	4.81E-04	2.91E-04	6.95E-01	5.64E+00	35
		ANNUAL	1ST HIGH	1.26E-03	9.70E-03	5.17E-03	6.68E-04	4.80E-05	2.02E-05	9.15E-02	5.96E-01	15
	SO_2	3- Hr	2ND HIGH	2.33E-03	6.77E-04	1.72E-03	1.77E-03	9.12E-05	7.04E-05	8.66E-01	8.95E+00	1,300
		24- Hr	2ND HIGH	8.68E-04	2.53E-04	5.67E-04	7.60E-04	3.09E-05	2.51E-05	3.77E-01	3.34E+00	260
		ANNUAL	1ST HIGH	1.08E-04	3.17E-05	8.13E-05	1.08E-04	3.90E-06	2.91E-06	5.90E-02	6.51E-01	60
Yellowstone NP Class I Area	NO_2	ANNUAL	1ST HIGH	1.84E-05	1.82E-04	5.62E-05	6.11E-05	2.96E-06	1.91E-07	3.11E-02	3.35E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.37E-02	1.41E-01	1.06E-01	1.33E-02	1.76E-03	4.22E-04	1.61E+00	4.57E+00	150
		ANNUAL	1ST HIGH	6.53E-04	3.81E-03	2.18E-03	6.26E-04	6.31E-05	9.93E-06	1.06E-01	2.59E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.60E-02	1.28E-01	8.99E-02	1.16E-02	8.63E-04	3.29E-04	1.32E+00	3.88E+00	35
		ANNUAL	1ST HIGH	4.40E-04	3.44E-03	1.86E-03	5.50E-04	3.08E-05	7.94E-06	9.07E-02	2.21E-01	15
	SO_2	3- Hr	2ND HIGH	2.62E-03	7.74E-04	2.66E-03	4.65E-03	1.11E-04	7.43E-05	1.68E+00	3.92E+00	1,300
		24- Hr	2ND HIGH	8.64E-04	2.59E-04	8.55E-04	1.91E-03	4.48E-05	3.55E-05	8.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	2.57E-05	7.80E-06	1.95E-05	7.04E-05	1.70E-06	8.23E-07	5.67E-02	1.68E-01	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Absaorka Beartooth W Class II Area	NO_2	1-Hr	1ST HIGH	7.70E-02	7.12E-01	2.26E-01	4.93E+00	3.73E-03	5.33E-04	7.48E+00	7.48E+00	565
		ANNUAL	1ST HIGH	3.64E-04	3.52E-03	5.10E-04	1.34E-02	2.35E-05	1.41E-06	1.02E-01	1.04E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.85E-02	2.26E-01	1.85E-01	7.28E-02	6.32E-03	9.25E-04	3.33E+00	5.75E+00	150
		ANNUAL	1ST HIGH	1.97E-03	1.05E-02	5.28E-03	5.18E-03	2.29E-04	2.46E-05	2.48E-01	3.82E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.57E-02	2.03E-01	1.55E-01	4.50E-02	3.05E-03	7.20E-04	2.70E+00	5.25E+00	35
		ANNUAL	1ST HIGH	1.19E-03	9.17E-03	4.38E-03	3.13E-03	9.85E-05	1.86E-05	1.71E-01	3.14E-01	15
	SO_2	1-Hr	1ST HIGH	1.04E-02	3.08E-03	1.16E-02	8.31E-01	4.89E-04	3.92E-04	8.99E+00	9.39E+00	1,300
		3- Hr	2ND HIGH	7.39E-03	2.27E-03	8.18E-03	2.91E-01	3.56E-04	2.62E-04	6.44E+00	7.81E+00	1,300
		24- Hr	2ND HIGH	1.86E-03	5.36E-04	1.62E-03	3.90E-02	1.49E-04	8.27E-05	2.53E+00	3.41E+00	260
		ANNUAL	1ST HIGH	1.09E-04	3.31E-05	5.88E-05	2.64E-03	7.63E-06	2.59E-06	1.85E-01	2.80E-01	60
Agate Fossil Beds NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.12E-04	1.06E-03	5.40E-04	4.80E-05	2.54E-06	2.22E-06	5.34E-03	2.40E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.26E-02	7.44E-02	4.10E-02	5.58E-03	6.16E-04	3.32E-04	5.85E-01	8.25E+00	150
		ANNUAL	1ST HIGH	1.15E-03	6.16E-03	3.78E-03	4.77E-04	5.67E-05	2.09E-05	7.93E-02	8.09E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.72E-03	6.76E-02	3.60E-02	4.92E-03	3.40E-04	2.67E-04	5.01E-01	6.67E+00	35
		ANNUAL	1ST HIGH	7.15E-04	5.40E-03	3.08E-03	4.13E-04	2.68E-05	1.60E-05	6.58E-02	5.58E-01	15
	SO_2	3- Hr	2ND HIGH	1.59E-03	4.59E-04	1.47E-03	1.49E-03	5.42E-05	7.12E-05	9.20E-01	8.05E+00	1,300
		24- Hr	2ND HIGH	5.36E-04	1.54E-04	4.28E-04	4.84E-04	2.02E-05	2.47E-05	3.67E-01	3.20E+00	260
		ANNUAL	1ST HIGH	6.81E-05	2.01E-05	5.44E-05	6.84E-05	2.04E-06	2.42E-06	4.63E-02	7.22E-01	60
Big Horn Canyon NRA Class II Area	NO_2	1-Hr	1ST HIGH	1.67E-01	1.53E+00	1.68E+00	8.08E-02	6.03E-03	1.94E+00	5.61E+01	6.50E+01	565
		ANNUAL	1ST HIGH	2.42E-03	2.31E-02	2.11E-02	2.00E-03	8.76E-05	4.74E-03	4.91E-01	5.34E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	9.97E-02	5.15E-01	4.51E-01	1.88E-02	2.51E-03	6.54E-02	1.60E+01	1.62E+01	150
		ANNUAL	1ST HIGH	6.72E-03	3.19E-02	3.05E-02	2.61E-03	3.58E-04	2.98E-03	1.33E+00	1.69E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	5.76E-02	4.46E-01	3.53E-01	1.53E-02	1.06E-03	2.91E-02	2.99E+00	5.50E+00	35
		ANNUAL	1ST HIGH	3.60E-03	2.65E-02	2.26E-02	2.05E-03	1.31E-04	1.42E-03	2.85E-01	5.20E-01	15
	SO_2	1-Hr	1ST HIGH	2.61E-02	7.97E-03	3.23E-02	1.81E-02	6.40E-04	3.14E-01	2.33E+01	2.69E+01	1,300
		3- Hr	2ND HIGH	1.43E-02	4.35E-03	2.67E-02	1.15E-02	4.59E-04	1.14E-01	1.24E+01	1.31E+01	1,300
		24- Hr	2ND HIGH	6.05E-03	1.82E-03	8.72E-03	3.51E-03	9.98E-05	1.70E-02	2.96E+00	4.79E+00	260
		ANNUAL	1ST HIGH	4.57E-04	1.40E-04	5.76E-04	6.26E-04	1.47E-05	8.40E-04	4.43E-01	6.11E-01	60
Black Elk W Class II Area	NO_2	ANNUAL	1ST HIGH	2.25E-04	2.12E-03	9.70E-04	1.13E-04	7.71E-06	2.30E-06	9.03E-03	1.79E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.02E-02	1.20E-01	6.12E-02	7.54E-03	1.03E-03	3.60E-04	8.57E-01	6.81E+00	150
		ANNUAL	1ST HIGH	1.88E-03	1.03E-02	5.77E-03	7.37E-04	9.84E-05	2.42E-05	1.09E-01	8.26E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.38E-02	1.09E-01	5.29E-02	6.63E-03	4.96E-04	2.99E-04	7.21E-01	5.37E+00	35
		ANNUAL	1ST HIGH	1.19E-03	9.11E-03	4.78E-03	6.40E-04	4.56E-05	1.88E-05	8.99E-02	5.35E-01	15
	SO_2	3- Hr	2ND HIGH	1.79E-03	5.22E-04	1.58E-03	1.60E-03	8.50E-05	6.62E-05	9.42E-01	6.85E+00	1,300
		24- Hr	2ND HIGH	8.03E-04	2.31E-04	5.55E-04	7.18E-04	3.23E-05	2.69E-05	3.07E-01	2.80E+00	260
		ANNUAL	1ST HIGH	1.04E-04	3.05E-05	7.46E-05	1.05E-04	3.80E-06	2.65E-06	5.79E-02	5.44E-01	60
Cloud Peak Class II Area	NO_2	ANNUAL	1ST HIGH	1.09E-03	1.01E-02	6.77E-03	2.97E-04	7.50E-06	3.53E-05	3.51E-02	6.71E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.53E-01	8.93E-01	6.57E-01	2.07E-02	2.10E-03	1.23E-03	2.53E+00	6.32E+00	150
		ANNUAL	1ST HIGH	4.73E-03	2.47E-02	1.94E-02	1.14E-03	1.12E-04	1.02E-04	1.93E-01	5.64E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.04E-01	8.09E-01	5.59E-01	1.84E-02	1.03E-03	9.57E-04	2.13E+00	4.97E+00	35
		ANNUAL	1ST HIGH	2.86E-03	2.15E-02	1.56E-02	9.70E-04	5.17E-05	7.25E-05	1.49E-01	4.27E-01	15
	SO_2	3- Hr	2ND HIGH	2.01E-02	5.85E-03	1.35E-02	8.99E-03	1.45E-04	3.61E-04	1.82E+00	5.04E+00	1,300
		24- Hr	2ND HIGH	6.29E-03	1.84E-03	5.60E-03	2.07E-03	5.68E-05	1.01E-04	5.97E-01	2.54E+00	260
		ANNUAL	1ST HIGH	2.47E-04	7.37E-05	2.49E-04	1.72E-04	3.64E-06	1.50E-05	9.77E-02	2.71E-01	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Crow IR Class II Area*	NO_2	1-Hr	1ST HIGH	4.38E+01	4.25E+02	3.22E+02	7.88E+01	1.46E+00	1.15E+01	**1.59E+03**	**1.59E+03**	565
		ANNUAL	1ST HIGH	1.10E-01	1.07E+00	1.64E+00	1.12E-01	2.34E-03	4.64E-02	7.10E+00	7.15E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	9.78E-01	2.54E+00	4.59E+00	4.59E-01	6.05E-02	2.39E-01	**2.04E+02**	**2.05E+02**	150
		ANNUAL	1ST HIGH	8.58E-02	2.39E-01	4.93E-01	2.50E-02	3.60E-03	1.83E-02	1.51E+01	1.55E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.63E-01	1.23E+00	1.80E+00	1.70E-01	1.22E-02	9.30E-02	4.18E+00	7.57E+00	35
		ANNUAL	1ST HIGH	2.48E-02	1.33E-01	2.11E-01	1.09E-02	8.10E-04	6.15E-03	4.78E-01	8.33E-01	15
	SO_2	1-Hr	1ST HIGH	4.21E+00	1.20E+00	4.93E+00	1.27E+01	5.06E-02	1.88E+00	2.54E+02	2.54E+02	1,300
		3- Hr	2ND HIGH	9.95E-01	2.84E-01	1.50E+00	2.14E+00	1.80E-02	4.11E-01	1.06E+02	1.06E+02	1,300
		24- Hr	2ND HIGH	1.31E-01	3.76E-02	2.74E-01	3.96E-01	2.56E-03	8.78E-02	1.59E+01	1.65E+01	260
		ANNUAL	1ST HIGH	1.11E-02	4.37E-03	2.57E-02	1.91E-02	1.49E-04	7.45E-03	2.45E+00	2.62E+00	60
Devils Tower NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.93E-03	1.82E-02	6.35E-03	9.27E-04	7.15E-05	1.49E-05	4.50E-02	5.23E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.79E-02	1.77E-01	1.22E-01	8.43E-03	1.95E-03	4.83E-04	9.67E-01	5.35E+00	150
		ANNUAL	1ST HIGH	4.69E-03	2.21E-02	1.17E-02	1.37E-03	2.65E-04	4.58E-05	1.62E-01	1.17E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.98E-02	1.51E-01	1.05E-01	7.37E-03	7.21E-04	3.95E-04	8.45E-01	4.28E+00	35
		ANNUAL	1ST HIGH	2.51E-03	1.83E-02	9.05E-03	1.10E-03	9.53E-05	3.32E-05	1.24E-01	5.71E-01	15
	SO_2	3- Hr	2ND HIGH	5.88E-03	1.68E-03	3.78E-03	4.61E-03	3.62E-04	2.66E-04	1.59E+00	1.53E+01	1,300
		24- Hr	2ND HIGH	2.49E-03	7.18E-04	1.42E-03	1.38E-03	1.05E-04	6.70E-05	6.24E-01	5.61E+00	260
		ANNUAL	1ST HIGH	3.55E-04	1.03E-04	2.12E-04	3.09E-04	1.40E-05	6.52E-06	9.96E-02	9.70E-01	60
Fort Belknap IR Class II Area	NO_2	1-Hr	1ST HIGH	1.42E-02	1.40E-01	1.28E-01	4.13E-02	2.36E-03	1.44E-04	3.46E+00	3.46E+00	565
		ANNUAL	1ST HIGH	7.12E-05	6.77E-04	1.70E-04	4.89E-04	2.35E-05	2.64E-07	8.48E-02	8.66E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.91E-02	1.10E-01	8.00E-02	1.71E-02	1.74E-03	2.97E-04	1.30E+00	2.36E+00	150
		ANNUAL	1ST HIGH	7.21E-04	3.50E-03	1.80E-03	1.12E-03	1.49E-04	6.57E-06	1.86E-01	2.58E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.26E-02	9.94E-02	6.66E-02	1.45E-02	7.09E-04	2.45E-04	1.11E+00	2.18E+00	35
		ANNUAL	1ST HIGH	4.10E-04	2.97E-03	1.39E-03	8.98E-04	5.69E-05	4.76E-06	1.12E-01	1.74E-01	15
	SO_2	1-Hr	1ST HIGH	4.01E-03	1.16E-03	3.92E-03	9.13E-03	2.80E-04	1.52E-04	3.09E+00	7.62E+00	1,300
		3- Hr	2ND HIGH	2.81E-03	8.18E-04	2.45E-03	6.76E-03	2.04E-04	7.61E-05	2.11E+00	5.53E+00	1,300
		24- Hr	2ND HIGH	1.11E-03	3.17E-04	7.63E-04	2.47E-03	6.89E-05	2.36E-05	6.99E-01	1.81E+00	260
		ANNUAL	1ST HIGH	4.36E-05	1.27E-05	2.78E-05	2.18E-04	5.58E-06	8.54E-07	1.47E-01	1.92E-01	60
Fort Laramie NHS Class II Area	NO_2	ANNUAL	1ST HIGH	8.12E-05	7.70E-04	4.22E-04	3.54E-05	1.85E-06	1.87E-06	3.66E-03	3.58E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.33E-02	8.24E-02	4.23E-02	5.58E-03	7.07E-04	1.94E-04	5.75E-01	7.43E+00	150
		ANNUAL	1ST HIGH	1.03E-03	5.56E-03	3.24E-03	4.35E-04	5.28E-05	1.87E-05	7.16E-02	9.52E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.25E-03	7.38E-02	3.58E-02	4.88E-03	3.46E-04	1.50E-04	4.92E-01	5.58E+00	35
		ANNUAL	1ST HIGH	6.46E-04	4.90E-03	2.65E-03	3.79E-04	2.54E-05	1.44E-05	5.98E-02	6.18E-01	15
	SO_2	3- Hr	2ND HIGH	1.90E-03	5.57E-04	1.52E-03	1.63E-03	6.85E-05	1.11E-04	9.23E-01	1.66E+01	1,300
		24- Hr	2ND HIGH	5.69E-04	1.66E-04	4.19E-04	6.00E-04	2.05E-05	2.31E-05	3.51E-01	4.23E+00	260
		ANNUAL	1ST HIGH	5.76E-05	1.70E-05	4.47E-05	5.92E-05	1.81E-06	2.12E-06	3.86E-02	9.21E-01	60
Jedediah Smith W Class II Area	NO_2	ANNUAL	1ST HIGH	2.67E-06	2.59E-05	9.35E-06	7.86E-06	3.67E-07	4.16E-08	1.17E-02	4.33E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.55E-03	5.15E-02	2.96E-02	3.62E-03	4.54E-04	1.33E-04	7.23E-01	3.58E+00	150
		ANNUAL	1ST HIGH	2.21E-04	1.30E-03	6.97E-04	1.72E-04	1.63E-05	3.32E-06	4.62E-02	3.19E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.15E-03	4.74E-02	2.52E-02	3.28E-03	2.45E-04	1.10E-04	6.25E-01	3.05E+00	35
		ANNUAL	1ST HIGH	1.53E-04	1.18E-03	5.99E-04	1.53E-04	8.45E-06	2.70E-06	4.14E-02	2.39E-01	15
	SO_2	3- Hr	2ND HIGH	8.76E-04	2.56E-04	6.46E-04	1.01E-03	2.44E-05	2.92E-05	2.31E+00	6.67E+00	1,300
		24- Hr	2ND HIGH	2.22E-04	6.72E-05	2.22E-04	3.83E-04	1.14E-05	1.07E-05	5.48E-01	2.08E+00	260
		ANNUAL	1ST HIGH	7.85E-06	2.36E-06	5.33E-06	1.74E-05	4.27E-07	2.73E-07	2.45E-02	3.53E-01	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Jewel Cave NM Class II Area	NO_2	ANNUAL	1ST HIGH	3.01E-04	2.83E-03	1.45E-03	1.06E-04	6.25E-06	3.79E-06	1.11E-02	2.08E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.27E-02	1.30E-01	7.11E-02	7.93E-03	9.39E-04	3.33E-04	8.06E-01	6.78E+00	150
		ANNUAL	1ST HIGH	2.00E-03	1.09E-02	6.38E-03	7.21E-04	9.04E-05	2.70E-05	1.12E-01	8.99E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.52E-02	1.20E-01	6.25E-02	7.23E-03	4.98E-04	2.75E-04	6.83E-01	5.28E+00	35
		ANNUAL	1ST HIGH	1.26E-03	9.58E-03	5.26E-03	6.27E-04	4.22E-05	2.08E-05	9.27E-02	5.82E-01	15
	SO_2	3- Hr	2ND HIGH	2.41E-03	7.00E-04	1.59E-03	1.52E-03	8.31E-05	6.52E-05	7.08E-01	7.28E+00	1,300
		24- Hr	2ND HIGH	9.13E-04	2.67E-04	5.85E-04	7.00E-04	3.38E-05	2.71E-05	4.20E-01	2.77E+00	260
		ANNUAL	1ST HIGH	1.13E-04	3.31E-05	8.57E-05	9.99E-05	3.35E-06	3.01E-06	6.09E-02	7.43E-01	60
Lee Metcalf W Class II Area	NO_2	1-Hr	1ST HIGH	2.27E-03	2.10E-02	5.97E-03	6.62E-03	2.40E-04	4.77E-05	1.16E+01	1.16E+01	565
		ANNUAL	1ST HIGH	1.54E-05	1.46E-04	1.11E-05	3.68E-05	8.38E-07	4.40E-08	1.50E-01	1.51E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.28E-02	7.43E-02	4.94E-02	1.38E-02	8.85E-04	2.83E-04	2.60E+00	3.46E+00	150
		ANNUAL	1ST HIGH	3.98E-04	2.29E-03	1.03E-03	4.87E-04	3.39E-05	4.83E-06	2.07E-01	2.63E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.41E-03	6.67E-02	4.15E-02	1.23E-02	4.58E-04	2.35E-04	2.23E+00	2.90E+00	35
		ANNUAL	1ST HIGH	2.66E-04	2.06E-03	8.80E-04	4.29E-04	1.71E-05	3.86E-06	1.62E-01	2.09E-01	15
	SO_2	1-Hr	1ST HIGH	1.58E-03	4.63E-04	1.01E-03	4.61E-03	6.68E-05	8.38E-05	8.73E+00	8.74E+00	1,300
		3- Hr	2ND HIGH	1.43E-03	4.21E-04	9.22E-04	2.79E-03	5.64E-05	7.40E-05	4.97E+00	4.97E+00	1,300
		24- Hr	2ND HIGH	4.73E-04	1.42E-04	3.82E-04	1.11E-03	2.43E-05	1.58E-05	1.53E+00	1.69E+00	260
		ANNUAL	1ST HIGH	1.70E-05	5.03E-06	8.85E-06	5.62E-05	9.34E-07	3.96E-07	1.77E-01	2.09E-01	60
Mt Naomi W Class II Area	NO_2	ANNUAL	1ST HIGH	3.57E-06	3.38E-05	2.11E-05	1.25E-06	6.47E-08	1.99E-08	5.48E-04	1.20E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.42E-03	1.78E-02	8.61E-03	1.73E-03	1.77E-04	5.13E-05	2.18E-01	5.23E+00	150
		ANNUAL	1ST HIGH	8.34E-05	4.68E-04	2.72E-04	4.02E-05	4.69E-06	9.85E-07	8.69E-03	2.23E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.13E-03	1.56E-02	7.05E-03	1.55E-03	9.42E-05	3.62E-05	1.84E-01	3.65E+00	35
		ANNUAL	1ST HIGH	5.50E-05	4.19E-04	2.27E-04	3.54E-05	2.39E-06	7.68E-07	7.68E-03	1.57E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	4.51E-04	1.36E-03	1.02E-03	1.96E-05	2.37E-05	5.26E-01	2.02E+01	1,300
		24- Hr	2ND HIGH	1.44E-04	4.20E-05	1.41E-04	2.08E-04	6.09E-06	7.37E-06	1.21E-01	6.02E+00	260
		ANNUAL	1ST HIGH	4.14E-06	1.23E-06	3.19E-06	4.79E-06	1.37E-07	1.02E-07	3.77E-03	3.75E-01	60
Mt Rushmore Class II Area	NO_2	ANNUAL	1ST HIGH	2.28E-04	2.15E-03	9.52E-04	1.16E-04	7.90E-06	2.31E-06	8.98E-03	2.02E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	1.15E-01	6.07E-02	7.60E-03	1.02E-03	3.47E-04	8.28E-01	6.91E+00	150
		ANNUAL	1ST HIGH	1.87E-03	1.03E-02	5.76E-03	7.38E-04	9.88E-05	2.42E-05	1.09E-01	8.60E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.32E-02	1.05E-01	5.12E-02	6.68E-03	5.03E-04	2.88E-04	7.01E-01	5.40E+00	35
		ANNUAL	1ST HIGH	1.19E-03	9.09E-03	4.77E-03	6.40E-04	4.57E-05	1.88E-05	8.98E-02	5.28E-01	15
	SO_2	3- Hr	2ND HIGH	1.77E-03	5.17E-04	1.56E-03	1.59E-03	8.31E-05	6.78E-05	9.45E-01	6.89E+00	1,300
		24- Hr	2ND HIGH	8.05E-04	2.31E-04	5.59E-04	7.19E-04	3.13E-05	2.65E-05	3.05E-01	2.71E+00	260
		ANNUAL	1ST HIGH	1.05E-04	3.06E-05	7.47E-05	1.06E-04	3.83E-06	2.66E-06	5.78E-02	5.28E-01	60
Popo Agie W Class II Area	NO_2	ANNUAL	1ST HIGH	3.18E-05	3.04E-04	1.49E-04	4.03E-05	2.11E-06	5.54E-07	3.31E-03	9.46E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.73E-02	1.55E-01	6.61E-02	9.51E-03	9.76E-04	3.27E-04	1.33E+00	1.02E+01	150
		ANNUAL	1ST HIGH	7.20E-04	4.11E-03	2.07E-03	5.05E-04	5.67E-05	1.21E-05	6.56E-02	5.53E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.80E-02	1.39E-01	5.57E-02	8.68E-03	5.28E-04	2.67E-04	1.12E+00	8.39E+00	35
		ANNUAL	1ST HIGH	4.76E-04	3.68E-03	1.74E-03	4.43E-04	2.79E-05	9.57E-06	5.67E-02	4.41E-01	15
	SO_2	3- Hr	2ND HIGH	2.97E-03	8.80E-04	3.92E-03	2.73E-03	6.28E-05	9.77E-05	2.30E+00	1.42E+01	1,300
		24- Hr	2ND HIGH	9.11E-04	2.64E-04	7.25E-04	1.05E-03	2.53E-05	2.77E-05	8.84E-01	5.43E+00	260
		ANNUAL	1ST HIGH	3.29E-05	9.90E-06	2.21E-05	6.06E-05	1.60E-06	1.16E-06	3.36E-02	4.87E-01	60

Table C-1 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Soldier Creek WA Class II Area	NO_2	ANNUAL	1ST HIGH	1.71E-04	1.61E-03	8.57E-04	7.14E-05	3.89E-06	2.86E-06	7.47E-03	2.43E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.41E-02	8.35E-02	4.70E-02	5.67E-03	5.79E-04	2.91E-04	7.56E-01	7.91E+00	150
		ANNUAL	1ST HIGH	1.44E-03	7.75E-03	4.75E-03	5.65E-04	6.70E-05	2.36E-05	9.18E-02	8.92E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.72E-03	7.59E-02	4.15E-02	5.03E-03	3.31E-04	2.30E-04	6.28E-01	6.11E+00	35
		ANNUAL	1ST HIGH	8.98E-04	6.81E-03	3.89E-03	4.90E-04	3.16E-05	1.80E-05	7.57E-02	5.95E-01	15
	SO_2	3- Hr	2ND HIGH	1.49E-03	4.32E-04	1.51E-03	1.05E-03	5.49E-05	6.45E-05	9.98E-01	9.46E+00	1,300
		24- Hr	2ND HIGH	5.99E-04	1.76E-04	5.30E-04	4.97E-04	1.91E-05	2.50E-05	3.90E-01	3.41E+00	260
		ANNUAL	1ST HIGH	8.45E-05	2.49E-05	6.72E-05	8.10E-05	2.46E-06	2.74E-06	5.39E-02	7.34E-01	60
Wellsville Mountain W Class II Area	NO_2	ANNUAL	1ST HIGH	3.03E-06	2.86E-05	1.76E-05	9.32E-07	4.20E-08	1.38E-08	2.41E-04	1.12E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.22E-03	1.16E-02	6.62E-03	1.73E-03	1.49E-04	4.01E-05	2.06E-01	3.47E+00	150
		ANNUAL	1ST HIGH	6.40E-05	3.60E-04	2.15E-04	2.94E-05	3.28E-06	7.05E-07	5.94E-03	1.81E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.40E-03	1.05E-02	5.72E-03	1.55E-03	7.88E-05	2.79E-05	1.73E-01	2.08E+00	35
		ANNUAL	1ST HIGH	4.23E-05	3.22E-04	1.79E-04	2.58E-05	1.67E-06	5.49E-07	5.20E-03	1.05E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	4.55E-04	1.40E-03	9.36E-04	1.33E-05	1.63E-05	4.99E-01	6.11E+00	1,300
		24- Hr	2ND HIGH	1.01E-04	3.05E-05	1.13E-04	2.10E-04	4.75E-06	4.66E-06	1.10E-01	2.71E+00	260
		ANNUAL	1ST HIGH	3.25E-06	9.57E-07	2.60E-06	3.55E-06	9.55E-08	7.25E-08	2.46E-03	1.50E-01	60
Wind River IR Class II Area	NO_2	ANNUAL	1ST HIGH	1.17E-04	1.12E-03	5.59E-04	3.50E-04	1.84E-05	2.46E-06	1.20E-02	7.34E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.25E-02	1.99E-01	1.24E-01	2.55E-02	2.76E-03	6.04E-04	2.16E+00	1.19E+01	150
		ANNUAL	1ST HIGH	1.46E-03	8.21E-03	4.33E-03	1.50E-03	1.88E-04	3.41E-05	1.41E-01	9.42E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.30E-02	1.84E-01	1.03E-01	2.32E-02	1.43E-03	4.68E-04	1.88E+00	9.81E+00	35
		ANNUAL	1ST HIGH	9.46E-04	7.32E-03	3.61E-03	1.28E-03	8.54E-05	2.66E-05	1.19E-01	6.79E-01	15
	SO_2	3- Hr	2ND HIGH	4.18E-03	1.24E-03	5.54E-03	6.70E-03	1.87E-04	2.03E-04	4.15E+00	1.84E+02	1,300
		24- Hr	2ND HIGH	1.29E-03	3.77E-04	1.37E-03	3.04E-03	7.75E-05	6.37E-05	1.81E+00	3.47E+01	260
		ANNUAL	1ST HIGH	7.09E-05	2.14E-05	5.10E-05	2.29E-04	5.86E-06	3.57E-06	9.70E-02	4.99E+00	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Notes:
(1) Bold type indicate a modeled impact that is above the NAAQS/SAAQS
(2) Includes 75% NOx to NO2 conversion
* Area's modeled impacts have excluded receptors within 1-km of a MT CBNG or MTOG Alternative H source

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
NEAR FIELD RECEPTORS												
Montana Near Field Receptors*	NO_2	1-Hr	1ST HIGH	3.31E+01	2.51E+02	5.39E+02	5.29E+01	2.30E+00	1.30E-01	5.40E+02	5.40E+02	565
		ANNUAL	1ST HIGH	2.41E-01	1.69E+00	1.58E+00	4.57E-01	1.34E-02	5.22E-04	2.22E+00	3.32E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	1.13E+00	2.90E+00	5.81E+00	6.67E-01	1.62E-01	4.80E-03	4.68E+01	4.69E+01	150
		ANNUAL	1ST HIGH	1.81E-01	4.32E-01	4.92E-01	9.27E-02	1.87E-02	3.74E-04	2.66E+00	2.88E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.68E-01	1.49E+00	2.16E+00	2.68E-01	3.24E-02	3.11E-03	3.14E+00	6.95E+00	35
		ANNUAL	1ST HIGH	5.23E-02	2.08E-01	2.21E-01	3.67E-02	3.89E-03	1.86E-04	4.56E-01	8.53E-01	15
	SO_2	1-Hr	1ST HIGH	3.18E+00	9.44E-01	8.22E+00	8.40E+00	2.31E-01	2.56E-02	1.40E+02	1.40E+02	1,300
		3- Hr	2ND HIGH	9.42E-01	2.80E-01	1.72E+00	3.36E+00	7.27E-02	1.05E-02	4.38E+01	4.39E+01	1,300
		24- Hr	2ND HIGH	1.63E-01	4.86E-02	3.39E-01	5.72E-01	1.12E-02	1.27E-03	1.51E+01	1.51E+01	260
		ANNUAL	1ST HIGH	2.41E-02	7.17E-03	2.48E-02	7.62E-02	7.03E-04	1.06E-04	1.63E+00	1.79E+00	60
Wyoming Near Field Receptors	NO_2	ANNUAL	1ST HIGH	4.84E-02	3.52E-01	2.52E-01	1.18E-02	7.39E-04	3.39E-04	5.31E-01	4.07E+01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.84E-01	9.28E-01	1.49E+00	4.41E-02	3.87E-02	5.47E-03	2.95E+00	1.06E+02	150
		ANNUAL	1ST HIGH	4.70E-02	1.34E-01	1.28E-01	5.45E-03	1.52E-03	3.84E-04	4.78E-01	1.91E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.28E-01	6.91E-01	1.07E+00	2.94E-02	1.14E-02	3.89E-03	2.27E+00	1.18E+01	35
		ANNUAL	1ST HIGH	1.70E-02	8.22E-02	7.51E-02	3.53E-03	3.86E-04	2.34E-04	2.90E-01	2.78E+00	15
	SO_2	3- Hr	2ND HIGH	1.46E-01	4.34E-02	1.32E-01	1.11E-01	5.78E-03	2.52E-03	6.71E+00	5.52E+02	1,300
		24- Hr	2ND HIGH	3.17E-02	9.42E-03	3.31E-02	1.82E-02	1.88E-03	6.46E-04	1.84E+00	1.24E+02	260
		ANNUAL	1ST HIGH	5.29E-03	1.58E-03	4.43E-03	2.32E-03	1.00E-04	7.98E-05	2.11E-01	1.72E+01	60
CLASS I AREAS												
Badlands NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.26E-04	1.66E-03	1.01E-03	1.48E-04	1.10E-05	2.84E-06	9.00E-03	1.31E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.34E-02	6.81E-02	5.25E-02	5.99E-03	9.94E-04	2.93E-04	7.71E-01	4.16E+00	150
		ANNUAL	1ST HIGH	1.66E-03	7.30E-03	5.02E-03	6.97E-04	1.04E-04	2.18E-05	9.52E-02	6.20E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.91E-03	6.19E-02	4.50E-02	5.29E-03	4.67E-04	2.43E-04	6.76E-01	3.51E+00	35
		ANNUAL	1ST HIGH	1.02E-03	6.15E-03	4.09E-03	5.96E-04	4.59E-05	1.66E-05	7.60E-02	4.32E-01	15
	SO_2	3- Hr	2ND HIGH	1.62E-03	5.05E-04	1.52E-03	1.75E-03	8.81E-05	6.13E-05	1.05E+00	8.51E+00	1,300
		24- Hr	2ND HIGH	5.35E-04	1.60E-04	4.54E-04	6.95E-04	3.98E-05	2.15E-05	3.30E-01	2.52E+00	260
		ANNUAL	1ST HIGH	9.56E-05	2.91E-05	6.98E-05	1.08E-04	4.14E-06	2.51E-06	5.55E-02	4.43E-01	60
Bob Marshall W Class I Area	NO_2	1-Hr	1ST HIGH	6.64E-04	4.97E-03	6.44E-03	1.48E-03	2.43E-05	4.87E-05	4.63E+00	4.63E+00	565
		ANNUAL	1ST HIGH	4.96E-07	3.70E-06	3.16E-06	2.33E-06	3.87E-08	1.23E-08	1.53E-02	1.53E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.10E-03	1.28E-02	1.25E-02	3.39E-03	3.21E-04	4.22E-05	1.43E+00	1.49E+00	150
		ANNUAL	1ST HIGH	8.62E-05	3.81E-04	2.78E-04	1.13E-04	9.30E-06	1.25E-06	6.31E-02	7.99E-02	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.90E-03	1.14E-02	1.00E-02	3.00E-03	1.20E-04	3.54E-05	8.58E-01	1.12E+00	35
		ANNUAL	1ST HIGH	5.58E-05	3.27E-04	2.30E-04	9.77E-05	4.36E-06	9.32E-07	4.19E-02	5.65E-02	15
	SO_2	1-Hr	1ST HIGH	7.53E-04	2.30E-04	7.35E-04	9.65E-04	3.72E-05	2.57E-05	4.20E+00	4.20E+00	1,300
		3- Hr	2ND HIGH	3.32E-04	1.02E-04	4.06E-04	8.56E-04	2.07E-05	1.58E-05	3.30E+00	3.30E+00	1,300
		24- Hr	2ND HIGH	1.70E-04	5.18E-05	1.52E-04	3.70E-04	8.17E-06	6.50E-06	6.19E-01	1.17E+00	260
		ANNUAL	1ST HIGH	3.97E-06	1.22E-06	3.10E-06	1.36E-05	2.60E-07	1.34E-07	3.85E-02	4.76E-02	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Bridger W Class I Area	NO_2	ANNUAL	1ST HIGH	2.33E-05	1.74E-04	1.14E-04	2.68E-05	1.42E-06	4.24E-07	3.30E-03	9.84E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.54E-02	1.17E-01	5.40E-02	1.14E-02	1.16E-03	2.92E-04	1.32E+00	7.20E+00	150
		ANNUAL	1ST HIGH	6.15E-04	2.87E-03	1.78E-03	4.15E-04	4.51E-05	1.01E-05	5.63E-02	5.21E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.67E-02	1.01E-01	4.58E-02	1.02E-02	6.35E-04	2.39E-04	1.11E+00	5.83E+00	35
		ANNUAL	1ST HIGH	4.09E-04	2.50E-03	1.50E-03	3.68E-04	2.26E-05	8.03E-06	4.88E-02	4.11E-01	15
	SO_2	3- Hr	2ND HIGH	3.07E-03	9.47E-04	4.26E-03	2.91E-03	7.36E-05	1.03E-04	1.96E+00	9.96E+00	1,300
		24- Hr	2ND HIGH	8.35E-04	2.52E-04	5.73E-04	1.03E-03	2.71E-05	2.58E-05	7.57E-01	4.39E+00	260
		ANNUAL	1ST HIGH	2.74E-05	8.57E-06	1.86E-05	4.73E-05	1.26E-06	9.72E-07	2.80E-02	4.37E-01	60
Fitzpatrick W Class I Area	NO_2	ANNUAL	1ST HIGH	2.17E-05	1.65E-04	9.16E-05	5.21E-05	2.77E-06	2.83E-07	3.60E-03	1.62E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.40E-02	1.14E-01	5.76E-02	1.49E-02	1.59E-03	2.21E-04	1.54E+00	6.81E+00	150
		ANNUAL	1ST HIGH	6.14E-04	2.91E-03	1.75E-03	5.91E-04	6.48E-05	1.03E-05	6.76E-02	3.88E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.61E-02	9.95E-02	4.92E-02	1.33E-02	8.01E-04	1.82E-04	1.27E+00	5.88E+00	35
		ANNUAL	1ST HIGH	4.12E-04	2.54E-03	1.49E-03	5.22E-04	3.22E-05	8.22E-06	5.90E-02	3.20E-01	15
	SO_2	3- Hr	2ND HIGH	2.73E-03	8.45E-04	4.01E-03	4.21E-03	1.06E-04	9.96E-05	3.36E+00	1.14E+01	1,300
		24- Hr	2ND HIGH	7.59E-04	2.39E-04	3.89E-04	1.45E-03	3.88E-05	2.04E-05	1.16E+00	4.16E+00	260
		ANNUAL	1ST HIGH	2.58E-05	8.26E-06	1.69E-05	6.86E-05	1.79E-06	8.95E-07	3.73E-02	2.62E-01	60
Fort Peck IR Class I Area	NO_2	1-Hr	1ST HIGH	5.32E-02	3.85E-01	3.12E-01	3.41E-02	1.16E-03	1.05E-03	1.31E+00	7.85E+00	565
		ANNUAL	1ST HIGH	2.53E-04	1.86E-03	8.50E-04	5.12E-04	2.24E-05	2.31E-06	2.74E-02	7.79E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.81E-02	1.14E-01	8.57E-02	1.37E-02	1.34E-03	3.63E-04	9.09E-01	3.83E+00	150
		ANNUAL	1ST HIGH	1.33E-03	5.59E-03	3.32E-03	1.24E-03	1.43E-04	1.24E-05	1.24E-01	2.85E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.55E-02	9.12E-02	7.04E-02	1.15E-02	6.25E-04	2.80E-04	6.61E-01	3.31E+00	35
		ANNUAL	1ST HIGH	7.72E-04	4.59E-03	2.61E-03	1.03E-03	5.80E-05	9.09E-06	8.08E-02	2.09E-01	15
	SO_2	1-Hr	1ST HIGH	6.89E-03	2.05E-03	6.91E-03	7.98E-03	1.39E-04	2.11E-04	3.65E+00	2.41E+01	1,300
		3- Hr	2ND HIGH	3.60E-03	1.07E-03	4.33E-03	5.37E-03	1.10E-04	1.61E-04	2.14E+00	1.83E+01	1,300
		24- Hr	2ND HIGH	1.31E-03	3.98E-04	9.38E-04	2.37E-03	4.50E-05	3.92E-05	6.34E-01	7.01E+00	260
		ANNUAL	1ST HIGH	7.61E-05	2.30E-05	4.70E-05	2.16E-04	5.16E-06	1.52E-06	7.94E-02	3.18E-01	60
Gates of the Mountain W Class I Area	NO_2	1-Hr	1ST HIGH	1.20E-03	9.03E-03	1.02E-02	9.22E-03	1.47E-04	6.11E-05	7.12E+00	7.12E+00	565
		ANNUAL	1ST HIGH	4.44E-06	3.30E-05	9.29E-06	2.81E-05	5.42E-07	2.84E-08	7.10E-02	7.13E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.97E-03	4.35E-02	3.11E-02	1.48E-02	9.95E-04	1.10E-04	2.69E+00	2.92E+00	150
		ANNUAL	1ST HIGH	2.55E-04	1.17E-03	6.94E-04	4.11E-04	3.03E-05	3.01E-06	1.84E-01	2.24E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.35E-03	3.88E-02	2.75E-02	1.31E-02	5.07E-04	8.84E-05	1.95E+00	2.29E+00	35
		ANNUAL	1ST HIGH	1.68E-04	1.01E-03	5.85E-04	3.57E-04	1.46E-05	2.35E-06	1.19E-01	1.55E-01	15
	SO_2	1-Hr	1ST HIGH	8.23E-04	2.53E-04	9.11E-04	3.70E-03	5.61E-05	3.97E-05	4.28E+00	4.30E+00	1,300
		3- Hr	2ND HIGH	6.16E-04	1.97E-04	5.65E-04	3.03E-03	5.00E-05	1.92E-05	3.47E+00	3.47E+00	1,300
		24- Hr	2ND HIGH	2.97E-04	9.21E-05	2.52E-04	1.50E-03	2.56E-05	8.26E-06	1.65E+00	1.67E+00	260
		ANNUAL	1ST HIGH	1.14E-05	3.51E-06	6.96E-06	5.14E-05	8.64E-07	2.85E-07	1.19E-01	1.42E-01	60
Grand Teton NP Class I Area	NO_2	ANNUAL	1ST HIGH	4.05E-06	3.06E-05	1.58E-05	1.07E-05	5.19E-07	5.94E-08	1.13E-02	3.55E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.03E-02	4.87E-02	3.17E-02	5.40E-03	6.46E-04	1.42E-04	7.47E-01	4.06E+00	150
		ANNUAL	1ST HIGH	2.78E-04	1.33E-03	8.87E-04	2.21E-04	2.22E-05	4.33E-06	4.44E-02	2.95E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	7.01E-03	4.29E-02	2.71E-02	4.81E-03	3.32E-04	1.18E-04	6.81E-01	3.36E+00	35
		ANNUAL	1ST HIGH	1.92E-04	1.17E-03	7.62E-04	1.97E-04	1.14E-05	3.51E-06	3.98E-02	2.27E-01	15
	SO_2	3- Hr	2ND HIGH	9.77E-04	2.98E-04	8.61E-04	1.34E-03	3.30E-05	3.42E-05	2.12E+00	5.97E+00	1,300
		24- Hr	2ND HIGH	2.70E-04	8.43E-05	2.39E-04	4.74E-04	1.33E-05	1.18E-05	5.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	1.02E-05	3.20E-06	7.16E-06	2.28E-05	5.87E-07	3.53E-07	2.36E-02	2.92E-01	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
North Absaorka W Class I Area	NO_2	ANNUAL	1ST HIGH	1.19E-04	6.34E-04	2.24E-04	7.47E-04	3.98E-05	6.04E-07	2.17E-02	2.75E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.36E-02	1.22E-01	1.47E-01	3.99E-02	5.97E-03	4.25E-04	1.80E+00	6.59E+00	150
		ANNUAL	1ST HIGH	1.32E-03	4.67E-03	3.61E-03	2.11E-03	2.89E-04	1.61E-05	1.43E-01	3.51E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.26E-02	1.02E-01	1.25E-01	3.40E-02	2.44E-03	3.32E-04	1.48E+00	5.38E+00	35
		ANNUAL	1ST HIGH	8.43E-04	3.79E-03	3.03E-03	1.77E-03	1.23E-04	1.26E-05	1.18E-01	2.93E-01	15
	SO_2	3- Hr	2ND HIGH	2.88E-03	8.96E-04	3.38E-03	1.43E-02	3.97E-04	9.47E-05	5.23E+00	7.73E+00	1,300
		24- Hr	2ND HIGH	1.30E-03	4.08E-04	1.26E-03	5.08E-03	1.52E-04	3.82E-05	1.86E+00	3.47E+00	260
		ANNUAL	1ST HIGH	6.29E-05	2.11E-05	3.62E-05	3.50E-04	9.15E-06	1.50E-06	1.09E-01	2.31E-01	60
North Cheyenne IR Class I Area*	NO_2	1-Hr	1ST HIGH	1.22E+01	8.77E+01	4.28E+02	5.08E-01	6.80E-02	2.68E+00	4.28E+02	4.28E+02	565
		ANNUAL	1ST HIGH	6.27E-02	4.57E-01	1.63E+00	3.58E-03	2.11E-04	1.71E-02	2.06E+00	2.15E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	4.29E-01	1.05E+00	3.92E+00	2.24E-02	7.74E-03	6.24E-02	4.63E+00	8.40E+00	150
		ANNUAL	1ST HIGH	5.28E-02	1.38E-01	4.76E-01	3.25E-03	6.23E-04	6.41E-03	8.90E-01	1.31E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.23E-01	5.22E-01	1.72E+00	1.73E-02	1.74E-03	1.69E-02	3.13E+00	5.97E+00	35
		ANNUAL	1ST HIGH	1.66E-02	7.26E-02	1.98E-01	2.44E-03	1.93E-04	1.83E-03	4.27E-01	7.03E-01	15
	SO_2	1-Hr	1ST HIGH	1.17E+00	3.47E-01	6.55E+00	8.80E-02	8.00E-03	4.63E-01	3.07E+01	3.07E+01	1,300
		3- Hr	2ND HIGH	3.83E-01	1.14E-01	1.67E+00	3.98E-02	3.62E-03	2.17E-01	8.55E+00	1.05E+01	1,300
		24- Hr	2ND HIGH	5.78E-02	1.72E-02	2.29E-01	6.13E-03	5.26E-04	2.81E-02	2.73E+00	4.70E+00	260
		ANNUAL	1ST HIGH	6.47E-03	1.96E-03	2.55E-02	8.64E-04	3.22E-05	3.00E-03	4.68E-01	7.22E-01	60
Red Rock Lakes Class I Area	NO_2	1-Hr	1ST HIGH	1.49E-03	1.07E-02	7.30E-04	2.34E-03	8.34E-05	2.07E-05	6.14E+00	6.14E+00	565
		ANNUAL	1ST HIGH	3.26E-06	2.44E-05	2.82E-06	7.09E-06	2.00E-07	2.36E-08	2.45E-02	3.00E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.20E-03	2.56E-02	1.70E-02	5.19E-03	5.76E-04	1.01E-04	6.32E-01	1.76E+00	150
		ANNUAL	1ST HIGH	1.71E-04	8.17E-04	5.01E-04	1.63E-04	1.29E-05	2.37E-06	5.48E-02	1.38E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.70E-03	2.29E-02	1.44E-02	4.69E-03	3.07E-04	7.93E-05	5.81E-01	1.53E+00	35
		ANNUAL	1ST HIGH	1.18E-04	7.21E-04	4.30E-04	1.45E-04	6.69E-06	1.92E-06	4.71E-02	1.13E-01	15
	SO_2	1-Hr	1ST HIGH	5.67E-04	1.75E-04	3.54E-04	1.62E-03	4.60E-05	2.60E-05	4.98E+00	4.98E+00	1,300
		3- Hr	2ND HIGH	4.91E-04	1.50E-04	3.00E-04	1.19E-03	3.68E-05	1.67E-05	2.56E+00	3.23E+00	1,300
		24- Hr	2ND HIGH	1.80E-04	5.81E-05	1.41E-04	3.82E-04	1.19E-05	6.48E-06	7.30E-01	1.10E+00	260
		ANNUAL	1ST HIGH	6.25E-06	1.94E-06	3.82E-06	1.63E-05	3.32E-07	1.84E-07	3.98E-02	9.60E-02	60
Scapegoat W Class I Area	NO_2	1-Hr	1ST HIGH	1.03E-03	7.80E-03	8.44E-03	2.77E-03	8.00E-05	5.71E-05	3.19E+00	3.19E+00	565
		ANNUAL	1ST HIGH	1.62E-06	1.20E-05	5.66E-06	8.13E-06	1.73E-07	1.84E-08	2.32E-02	2.34E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.52E-03	2.67E-02	2.08E-02	6.16E-03	4.44E-04	7.28E-05	2.78E+00	2.82E+00	150
		ANNUAL	1ST HIGH	1.61E-04	7.29E-04	4.75E-04	2.43E-04	1.83E-05	2.12E-06	1.17E-01	1.46E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.92E-03	2.38E-02	1.84E-02	5.50E-03	2.29E-04	5.62E-05	1.91E+00	1.91E+00	35
		ANNUAL	1ST HIGH	1.06E-04	6.30E-04	3.98E-04	2.12E-04	8.81E-06	1.62E-06	7.90E-02	1.04E-01	15
	SO_2	1-Hr	1ST HIGH	6.35E-04	2.06E-04	7.65E-04	1.71E-03	3.42E-05	4.44E-05	3.48E+00	4.74E+00	1,300
		3- Hr	2ND HIGH	4.92E-04	1.50E-04	5.00E-04	1.38E-03	2.62E-05	1.92E-05	2.69E+00	2.72E+00	1,300
		24- Hr	2ND HIGH	2.47E-04	7.57E-05	1.86E-04	7.20E-04	1.22E-05	9.12E-06	1.30E+00	1.43E+00	260
		ANNUAL	1ST HIGH	7.23E-06	2.23E-06	4.89E-06	2.93E-05	5.16E-07	2.15E-07	6.57E-02	8.27E-02	60
Teton W Class I Area	NO_2	ANNUAL	1ST HIGH	2.27E-05	1.77E-04	4.14E-05	1.05E-04	5.78E-06	1.69E-07	7.70E-03	2.23E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	9.45E-02	6.45E-02	2.25E-02	2.82E-03	3.10E-04	1.53E+00	4.69E+00	150
		ANNUAL	1ST HIGH	6.09E-04	2.88E-03	1.73E-03	7.28E-04	8.46E-05	9.00E-06	7.83E-02	2.79E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	8.40E-02	5.33E-02	1.95E-02	1.33E-03	2.52E-04	1.28E+00	3.98E+00	35
		ANNUAL	1ST HIGH	4.05E-04	2.51E-03	1.46E-03	6.34E-04	4.04E-05	7.18E-06	6.74E-02	2.34E-01	15
	SO_2	3- Hr	2ND HIGH	1.43E-03	4.50E-04	1.71E-03	9.01E-03	2.27E-04	5.11E-05	2.91E+00	5.92E+00	1,300
		24- Hr	2ND HIGH	6.61E-04	2.20E-04	6.03E-04	2.75E-03	7.61E-05	1.84E-05	1.07E+00	2.55E+00	260
		ANNUAL	1ST HIGH	2.48E-05	8.09E-06	1.55E-05	9.08E-05	2.36E-06	7.49E-07	4.53E-02	1.98E-01	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Theodore Roosevelt NP Class I Area	NO_2	ANNUAL	1ST HIGH	3.96E-04	2.91E-03	1.83E-03	2.99E-04	2.04E-05	4.47E-06	2.95E-02	6.00E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.71E-02	1.33E-01	1.16E-01	2.05E-02	1.79E-03	3.76E-04	1.66E+00	5.66E+00	150
		ANNUAL	1ST HIGH	1.90E-03	8.10E-03	5.89E-03	9.78E-04	1.34E-04	2.26E-05	1.36E-01	4.48E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.85E-02	1.17E-01	9.17E-02	1.84E-02	9.35E-04	2.95E-04	1.30E+00	4.75E+00	35
		ANNUAL	1ST HIGH	1.12E-03	6.69E-03	4.69E-03	8.27E-04	5.58E-05	1.67E-05	9.68E-02	3.36E-01	15
	SO_2	3- Hr	2ND HIGH	2.51E-03	7.50E-04	2.39E-03	2.74E-03	1.25E-04	1.26E-04	2.14E+00	3.66E+01	1,300
		24- Hr	2ND HIGH	1.04E-03	3.15E-04	1.26E-03	1.44E-03	4.77E-05	4.46E-05	1.05E+00	1.09E+01	260
		ANNUAL	1ST HIGH	1.13E-04	3.42E-05	8.50E-05	1.61E-04	5.16E-06	2.81E-06	1.07E-01	8.20E-01	60
UL Bend W Class I Area	NO_2	1-Hr	1ST HIGH	2.42E-02	1.75E-01	1.59E-01	1.08E-01	5.54E-03	3.21E-04	2.30E+00	2.30E+00	565
		ANNUAL	1ST HIGH	1.73E-04	1.27E-03	3.92E-04	1.54E-03	7.16E-05	7.48E-07	5.77E-02	6.25E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.09E-02	9.69E-02	6.82E-02	2.38E-02	2.77E-03	2.03E-04	1.34E+00	2.55E+00	150
		ANNUAL	1ST HIGH	1.10E-03	4.38E-03	2.55E-03	2.01E-03	2.86E-04	9.13E-06	1.87E-01	2.88E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.35E-02	8.37E-02	5.70E-02	1.98E-02	1.24E-03	1.54E-04	1.15E+00	2.35E+00	35
		ANNUAL	1ST HIGH	6.09E-04	3.50E-03	1.96E-03	1.57E-03	1.01E-04	6.36E-06	1.19E-01	1.99E-01	15
	SO_2	1-Hr	1ST HIGH	4.23E-03	1.28E-03	5.60E-03	2.15E-02	5.59E-04	1.42E-04	3.68E+00	1.01E+01	1,300
		3- Hr	2ND HIGH	3.39E-03	1.01E-03	3.43E-03	1.34E-02	2.89E-04	1.17E-04	2.44E+00	5.60E+00	1,300
		24- Hr	2ND HIGH	1.19E-03	3.56E-04	8.88E-04	4.56E-03	1.20E-04	3.12E-05	9.17E-01	2.08E+00	260
		ANNUAL	1ST HIGH	6.99E-05	2.11E-05	4.07E-05	4.74E-04	1.17E-05	1.23E-06	1.35E-01	2.08E-01	60
Washakie W Class I Area	NO_2	ANNUAL	1ST HIGH	9.28E-05	7.34E-04	1.15E-04	5.68E-04	3.18E-05	6.23E-07	1.56E-02	2.49E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.18E-02	1.53E-01	1.05E-01	3.69E-02	4.93E-03	4.76E-04	2.17E+00	6.89E+00	150
		ANNUAL	1ST HIGH	1.12E-03	5.24E-03	2.81E-03	1.87E-03	2.53E-04	1.89E-05	1.28E-01	4.20E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.07E-02	1.32E-01	8.86E-02	3.14E-02	2.18E-03	3.85E-04	1.93E+00	5.77E+00	35
		ANNUAL	1ST HIGH	7.19E-04	4.50E-03	2.37E-03	1.57E-03	1.10E-04	1.49E-05	1.07E-01	3.52E-01	15
	SO_2	3- Hr	2ND HIGH	3.23E-03	1.07E-03	2.73E-03	1.95E-02	5.20E-04	1.32E-04	6.75E+00	9.41E+00	1,300
		24- Hr	2ND HIGH	1.17E-03	3.80E-04	9.85E-04	5.42E-03	1.48E-04	3.70E-05	2.19E+00	3.88E+00	260
		ANNUAL	1ST HIGH	5.18E-05	1.77E-05	2.69E-05	2.93E-04	7.80E-06	1.71E-06	9.57E-02	2.77E-01	60
Wind Cave NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.48E-04	1.82E-03	1.17E-03	1.12E-04	7.64E-06	3.13E-06	8.88E-03	1.81E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.00E-02	9.64E-02	6.56E-02	7.64E-03	9.60E-04	3.52E-04	8.20E-01	7.03E+00	150
		ANNUAL	1ST HIGH	1.99E-03	8.98E-03	6.25E-03	7.68E-04	1.03E-04	2.62E-05	1.09E-01	8.70E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	8.51E-02	5.66E-02	6.70E-03	4.81E-04	2.91E-04	6.71E-01	5.63E+00	35
		ANNUAL	1ST HIGH	1.26E-03	7.68E-03	5.17E-03	6.68E-04	4.80E-05	2.02E-05	8.95E-02	5.94E-01	15
	SO_2	3- Hr	2ND HIGH	2.33E-03	7.03E-04	1.72E-03	1.77E-03	9.12E-05	7.04E-05	8.66E-01	8.95E+00	1,300
		24- Hr	2ND HIGH	8.68E-04	2.63E-04	5.67E-04	7.60E-04	3.09E-05	2.51E-05	3.77E-01	3.34E+00	260
		ANNUAL	1ST HIGH	1.08E-04	3.30E-05	8.13E-05	1.08E-04	3.90E-06	2.91E-06	5.90E-02	6.51E-01	60
Yellowstone NP Class I Area	NO_2	ANNUAL	1ST HIGH	1.84E-05	1.42E-04	5.62E-05	6.11E-05	2.96E-06	1.91E-07	3.11E-02	3.34E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.37E-02	1.15E-01	1.06E-01	1.33E-02	1.76E-03	4.22E-04	1.56E+00	4.56E+00	150
		ANNUAL	1ST HIGH	6.53E-04	3.11E-03	2.18E-03	6.26E-04	6.31E-05	9.93E-06	1.05E-01	2.58E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.60E-02	1.01E-01	8.99E-02	1.16E-02	8.63E-04	3.29E-04	1.27E+00	3.87E+00	35
		ANNUAL	1ST HIGH	4.40E-04	2.72E-03	1.86E-03	5.50E-04	3.08E-05	7.94E-06	9.00E-02	2.20E-01	15
	SO_2	3- Hr	2ND HIGH	2.62E-03	8.04E-04	2.66E-03	4.65E-03	1.11E-04	7.43E-05	1.68E+00	3.92E+00	1,300
		24- Hr	2ND HIGH	8.64E-04	2.69E-04	8.55E-04	1.91E-03	4.48E-05	3.55E-05	8.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	2.57E-05	8.10E-06	1.95E-05	7.04E-05	1.70E-06	8.23E-07	5.67E-02	1.68E-01	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Absaorka Beartooth W Class II Area	NO_2	1-Hr	1ST HIGH	7.70E-02	5.55E-01	2.26E-01	4.93E+00	3.73E-03	5.33E-04	7.48E+00	7.48E+00	565
		ANNUAL	1ST HIGH	3.64E-04	2.74E-03	5.10E-04	1.34E-02	2.35E-05	1.41E-06	1.02E-01	1.04E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.85E-02	1.84E-01	1.85E-01	7.28E-02	6.32E-03	9.25E-04	3.22E+00	5.74E+00	150
		ANNUAL	1ST HIGH	1.97E-03	8.69E-03	5.28E-03	5.18E-03	2.29E-04	2.46E-05	2.47E-01	3.80E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.57E-02	1.61E-01	1.55E-01	4.50E-02	3.05E-03	7.20E-04	2.59E+00	5.24E+00	35
		ANNUAL	1ST HIGH	1.19E-03	7.27E-03	4.38E-03	3.13E-03	9.85E-05	1.86E-05	1.71E-01	3.13E-01	15
	SO_2	1-Hr	1ST HIGH	1.04E-02	3.21E-03	1.16E-02	8.31E-01	4.89E-04	3.92E-04	8.99E+00	9.39E+00	1,300
		3- Hr	2ND HIGH	7.39E-03	2.36E-03	8.18E-03	2.91E-01	3.56E-04	2.62E-04	6.44E+00	7.81E+00	1,300
		24- Hr	2ND HIGH	1.86E-03	5.57E-04	1.62E-03	3.90E-02	1.49E-04	8.27E-05	2.53E+00	3.41E+00	260
		ANNUAL	1ST HIGH	1.09E-04	3.44E-05	5.88E-05	2.64E-03	7.63E-06	2.59E-06	1.85E-01	2.80E-01	60
Agate Fossil Beds NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.12E-04	8.24E-04	5.40E-04	4.80E-05	2.54E-06	2.22E-06	5.11E-03	2.40E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.26E-02	6.05E-02	4.10E-02	5.58E-03	6.16E-04	3.32E-04	5.80E-01	8.24E+00	150
		ANNUAL	1ST HIGH	1.15E-03	5.07E-03	3.78E-03	4.77E-04	5.67E-05	2.09E-05	7.83E-02	8.08E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.72E-03	5.34E-02	3.60E-02	4.92E-03	3.40E-04	2.67E-04	4.96E-01	6.66E+00	35
		ANNUAL	1ST HIGH	7.15E-04	4.28E-03	3.08E-03	4.13E-04	2.68E-05	1.60E-05	6.47E-02	5.56E-01	15
	SO_2	3- Hr	2ND HIGH	1.59E-03	4.77E-04	1.47E-03	1.49E-03	5.42E-05	7.12E-05	9.20E-01	8.05E+00	1,300
		24- Hr	2ND HIGH	5.36E-04	1.60E-04	4.28E-04	4.84E-04	2.02E-05	2.47E-05	3.67E-01	3.20E+00	260
		ANNUAL	1ST HIGH	6.81E-05	2.09E-05	5.44E-05	6.84E-05	2.04E-06	2.42E-06	4.63E-02	7.22E-01	60
Big Horn Canyon NRA Class II Area	NO_2	1-Hr	1ST HIGH	1.67E-01	1.19E+00	1.68E+00	8.08E-02	6.03E-03	1.94E+00	5.60E+01	6.50E+01	565
		ANNUAL	1ST HIGH	2.42E-03	1.80E-02	2.11E-02	2.00E-03	8.76E-05	4.74E-03	4.86E-01	5.29E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	9.97E-02	4.23E-01	4.51E-01	1.88E-02	2.51E-03	6.54E-02	1.60E+01	1.61E+01	150
		ANNUAL	1ST HIGH	6.72E-03	2.67E-02	3.05E-02	2.61E-03	3.58E-04	2.98E-03	1.32E+00	1.68E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	5.76E-02	3.54E-01	3.53E-01	1.53E-02	1.06E-03	2.91E-02	2.94E+00	5.44E+00	35
		ANNUAL	1ST HIGH	3.60E-03	2.11E-02	2.26E-02	2.05E-03	1.31E-04	1.42E-03	2.80E-01	5.15E-01	15
	SO_2	1-Hr	1ST HIGH	2.61E-02	8.28E-03	3.23E-02	1.81E-02	6.40E-04	3.14E-01	2.33E+01	2.69E+01	1,300
		3- Hr	2ND HIGH	1.43E-02	4.52E-03	2.67E-02	1.15E-02	4.59E-04	1.14E-01	1.24E+01	1.31E+01	1,300
		24- Hr	2ND HIGH	6.05E-03	1.89E-03	8.72E-03	3.51E-03	9.98E-05	1.70E-02	2.96E+00	4.79E+00	260
		ANNUAL	1ST HIGH	4.57E-04	1.46E-04	5.76E-04	6.26E-04	1.47E-05	8.40E-04	4.43E-01	6.11E-01	60
Black Elk W Class II Area	NO_2	ANNUAL	1ST HIGH	2.25E-04	1.66E-03	9.70E-04	1.13E-04	7.71E-06	2.30E-06	8.57E-03	1.79E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.02E-02	9.76E-02	6.12E-02	7.54E-03	1.03E-03	3.60E-04	8.29E-01	6.78E+00	150
		ANNUAL	1ST HIGH	1.88E-03	8.45E-03	5.77E-03	7.37E-04	9.84E-05	2.42E-05	1.07E-01	8.24E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.38E-02	8.61E-02	5.29E-02	6.63E-03	4.96E-04	2.99E-04	6.97E-01	5.34E+00	35
		ANNUAL	1ST HIGH	1.19E-03	7.22E-03	4.78E-03	6.40E-04	4.56E-05	1.88E-05	8.80E-02	5.33E-01	15
	SO_2	3- Hr	2ND HIGH	1.79E-03	5.42E-04	1.58E-03	1.60E-03	8.50E-05	6.62E-05	9.42E-01	6.85E+00	1,300
		24- Hr	2ND HIGH	8.03E-04	2.40E-04	5.55E-04	7.18E-04	3.23E-05	2.69E-05	3.07E-01	2.80E+00	260
		ANNUAL	1ST HIGH	1.04E-04	3.17E-05	7.46E-05	1.05E-04	3.80E-06	2.65E-06	5.79E-02	5.44E-01	60
Cloud Peak Class II Area	NO_2	ANNUAL	1ST HIGH	1.09E-03	7.88E-03	6.77E-03	2.97E-04	7.50E-06	3.53E-05	3.29E-02	6.48E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.53E-01	7.27E-01	6.57E-01	2.07E-02	2.10E-03	1.23E-03	2.36E+00	6.29E+00	150
		ANNUAL	1ST HIGH	4.73E-03	2.04E-02	1.94E-02	1.14E-03	1.12E-04	1.02E-04	1.88E-01	5.59E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.04E-01	6.39E-01	5.59E-01	1.84E-02	1.03E-03	9.57E-04	1.98E+00	4.93E+00	35
		ANNUAL	1ST HIGH	2.86E-03	1.70E-02	1.56E-02	9.70E-04	5.17E-05	7.25E-05	1.44E-01	4.23E-01	15
	SO_2	3- Hr	2ND HIGH	2.01E-02	6.08E-03	1.35E-02	8.99E-03	1.45E-04	3.61E-04	1.82E+00	5.04E+00	1,300
		24- Hr	2ND HIGH	6.29E-03	1.92E-03	5.60E-03	2.07E-03	5.68E-05	1.01E-04	5.97E-01	2.54E+00	260
		ANNUAL	1ST HIGH	2.47E-04	7.66E-05	2.49E-04	1.72E-04	3.64E-06	1.50E-05	9.77E-02	2.71E-01	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Crow IR Class II Area*	NO_2	1-Hr	1ST HIGH	4.38E+01	3.32E+02	3.22E+02	7.88E+01	1.46E+00	1.15E+01	**1.59E+03**	**1.59E+03**	565
		ANNUAL	1ST HIGH	**1.10E-01**	**8.31E-01**	**1.64E+00**	**1.12E-01**	**2.34E-03**	**4.64E-02**	**7.10E+00**	**7.14E+00**	100
	PM_{10} Total	24- Hr	2ND HIGH	9.78E-01	2.41E+00	4.59E+00	4.59E-01	6.05E-02	2.39E-01	**2.04E+02**	**2.05E+02**	150
		ANNUAL	1ST HIGH	8.58E-02	2.22E-01	4.93E-01	2.50E-02	3.60E-03	1.83E-02	1.51E+01	1.54E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.63E-01	1.05E+00	1.80E+00	1.70E-01	1.22E-02	9.30E-02	4.18E+00	7.56E+00	35
		ANNUAL	1ST HIGH	2.48E-02	1.11E-01	2.11E-01	1.09E-02	8.10E-04	6.15E-03	4.58E-01	8.13E-01	15
	SO_2	1-Hr	1ST HIGH	4.21E+00	1.25E+00	4.93E+00	1.27E+01	5.06E-02	1.88E+00	**2.54E+02**	**2.54E+02**	1,300
		3- Hr	2ND HIGH	9.95E-01	2.95E-01	1.50E+00	2.14E+00	1.80E-02	4.11E-01	1.06E+02	1.06E+02	1,300
		24- Hr	2ND HIGH	1.31E-01	3.90E-02	2.74E-01	3.96E-01	2.56E-03	8.78E-02	1.59E+01	1.65E+01	260
		ANNUAL	1ST HIGH	1.11E-02	4.55E-03	2.57E-02	1.91E-02	1.49E-04	7.45E-03	2.45E+00	2.62E+00	60
Devils Tower NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.93E-03	1.42E-02	6.35E-03	9.27E-04	7.15E-05	1.49E-05	4.10E-02	5.19E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.79E-02	1.49E-01	1.22E-01	8.43E-03	1.95E-03	4.83E-04	9.57E-01	5.35E+00	150
		ANNUAL	1ST HIGH	4.69E-03	1.85E-02	1.17E-02	1.37E-03	2.65E-04	4.58E-05	1.58E-01	1.17E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.98E-02	1.19E-01	1.05E-01	7.37E-03	7.21E-04	3.95E-04	8.35E-01	4.26E+00	35
		ANNUAL	1ST HIGH	2.51E-03	1.46E-02	9.05E-03	1.10E-03	9.53E-05	3.32E-05	1.21E-01	5.67E-01	15
	SO_2	3- Hr	2ND HIGH	5.88E-03	1.75E-03	3.78E-03	4.61E-03	3.62E-04	2.66E-04	1.59E+00	**1.53E+01**	1,300
		24- Hr	2ND HIGH	2.49E-03	7.46E-04	1.42E-03	1.38E-03	1.05E-04	6.70E-05	6.24E-01	5.61E+00	260
		ANNUAL	1ST HIGH	3.55E-04	1.07E-04	2.12E-04	3.09E-04	1.40E-05	6.52E-06	9.96E-02	9.70E-01	60
Fort Belknap IR Class II Area	NO_2	1-Hr	1ST HIGH	1.42E-02	1.09E-01	1.28E-01	4.13E-02	2.36E-03	1.44E-04	3.46E+00	3.46E+00	565
		ANNUAL	1ST HIGH	7.12E-05	5.28E-04	1.70E-04	4.89E-04	2.35E-05	2.64E-07	8.47E-02	8.65E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.91E-02	9.00E-02	8.00E-02	1.71E-02	1.74E-03	2.97E-04	1.27E+00	2.36E+00	150
		ANNUAL	1ST HIGH	7.21E-04	2.92E-03	1.80E-03	1.12E-03	1.49E-04	6.57E-06	1.85E-01	2.58E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.26E-02	7.85E-02	6.66E-02	1.45E-02	7.09E-04	2.45E-04	1.08E+00	2.18E+00	35
		ANNUAL	1ST HIGH	4.10E-04	2.36E-03	1.39E-03	8.98E-04	5.69E-05	4.76E-06	1.11E-01	1.73E-01	15
	SO_2	1-Hr	1ST HIGH	4.01E-03	1.20E-03	3.92E-03	9.13E-03	2.80E-04	1.52E-04	3.09E+00	7.62E+00	1,300
		3- Hr	2ND HIGH	2.81E-03	8.50E-04	2.45E-03	6.76E-03	2.04E-04	7.61E-05	2.11E+00	5.53E+00	1,300
		24- Hr	2ND HIGH	1.11E-03	3.29E-04	7.63E-04	2.47E-03	6.89E-05	2.36E-05	6.99E-01	1.81E+00	260
		ANNUAL	1ST HIGH	4.36E-05	1.32E-05	2.78E-05	2.18E-04	5.58E-06	8.54E-07	1.47E-01	1.92E-01	60
Fort Laramie NHS Class II Area	NO_2	ANNUAL	1ST HIGH	8.12E-05	6.00E-04	4.22E-04	3.54E-05	1.85E-06	1.87E-06	3.49E-03	3.58E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.33E-02	6.71E-02	4.23E-02	5.58E-03	7.07E-04	1.94E-04	5.70E-01	7.43E+00	150
		ANNUAL	1ST HIGH	1.03E-03	4.57E-03	3.24E-03	4.35E-04	5.28E-05	1.87E-05	7.06E-02	9.51E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.25E-03	5.83E-02	3.58E-02	4.88E-03	3.46E-04	1.50E-04	4.87E-01	5.57E+00	35
		ANNUAL	1ST HIGH	6.46E-04	3.88E-03	2.65E-03	3.79E-04	2.54E-05	1.44E-05	5.88E-02	6.17E-01	15
	SO_2	3- Hr	2ND HIGH	1.90E-03	5.79E-04	1.52E-03	1.63E-03	6.85E-05	1.11E-04	9.23E-01	**1.66E+01**	1,300
		24- Hr	2ND HIGH	5.69E-04	1.72E-04	4.19E-04	6.00E-04	2.05E-05	2.31E-05	3.51E-01	4.23E+00	260
		ANNUAL	1ST HIGH	5.76E-05	1.77E-05	4.47E-05	5.92E-05	1.81E-06	2.12E-06	3.86E-02	9.21E-01	60
Jedediah Smith W Class II Area	NO_2	ANNUAL	1ST HIGH	2.67E-06	2.02E-05	9.35E-06	7.86E-06	3.67E-07	4.16E-08	1.17E-02	4.33E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.55E-03	4.17E-02	2.96E-02	3.62E-03	4.54E-04	1.33E-04	7.10E-01	3.57E+00	150
		ANNUAL	1ST HIGH	2.21E-04	1.06E-03	6.97E-04	1.72E-04	1.63E-05	3.32E-06	4.59E-02	3.18E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.15E-03	3.74E-02	2.52E-02	3.28E-03	2.45E-04	1.10E-04	6.12E-01	3.04E+00	35
		ANNUAL	1ST HIGH	1.53E-04	9.35E-04	5.99E-04	1.53E-04	8.45E-06	2.70E-06	4.12E-02	2.39E-01	15
	SO_2	3- Hr	2ND HIGH	8.76E-04	2.66E-04	6.46E-04	1.01E-03	2.44E-05	2.92E-05	2.31E+00	6.67E+00	1,300
		24- Hr	2ND HIGH	2.22E-04	6.99E-05	2.22E-04	3.83E-04	1.14E-05	1.07E-05	5.48E-01	2.08E+00	260
		ANNUAL	1ST HIGH	7.85E-06	2.45E-06	5.33E-06	1.74E-05	4.27E-07	2.73E-07	2.45E-02	3.53E-01	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Jewel Cave NM Class II Area	NO_2	ANNUAL	1ST HIGH	3.01E-04	2.21E-03	1.45E-03	1.06E-04	6.25E-06	3.79E-06	1.04E-02	2.07E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.27E-02	1.05E-01	7.11E-02	7.93E-03	9.39E-04	3.33E-04	7.89E-01	6.75E+00	150
		ANNUAL	1ST HIGH	**2.00E-03**	**8.93E-03**	**6.38E-03**	**7.21E-04**	**9.04E-05**	**2.70E-05**	**1.10E-01**	**8.97E-01**	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.52E-02	9.46E-02	6.25E-02	7.23E-03	4.98E-04	2.75E-04	6.66E-01	5.25E+00	35
		ANNUAL	1ST HIGH	1.26E-03	7.60E-03	5.26E-03	6.27E-04	4.22E-05	2.08E-05	9.07E-02	5.80E-01	15
	SO_2	3- Hr	2ND HIGH	2.41E-03	7.27E-04	1.59E-03	1.52E-03	8.31E-05	6.52E-05	7.08E-01	7.28E+00	1,300
		24- Hr	2ND HIGH	9.13E-04	2.77E-04	5.85E-04	7.00E-04	3.38E-05	2.71E-05	4.20E-01	2.77E+00	260
		ANNUAL	1ST HIGH	1.13E-04	3.44E-05	8.57E-05	9.99E-05	3.35E-06	3.01E-06	6.09E-02	7.43E-01	60
Lee Metcalf W Class II Area	NO_2	1-Hr	1ST HIGH	2.27E-03	1.64E-02	5.97E-03	6.62E-03	2.40E-04	4.77E-05	1.16E+01	1.16E+01	565
		ANNUAL	1ST HIGH	1.54E-05	1.14E-04	1.11E-05	3.68E-05	8.38E-07	4.40E-08	1.50E-01	1.51E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.28E-02	6.06E-02	4.94E-02	1.38E-02	8.85E-04	2.83E-04	2.59E+00	3.45E+00	150
		ANNUAL	1ST HIGH	3.98E-04	1.87E-03	1.03E-03	4.87E-04	3.39E-05	4.83E-06	2.06E-01	2.62E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.41E-03	5.27E-02	4.15E-02	1.23E-02	4.58E-04	2.35E-04	2.22E+00	2.89E+00	35
		ANNUAL	1ST HIGH	2.66E-04	1.63E-03	8.80E-04	4.29E-04	1.71E-05	3.86E-06	1.61E-01	2.09E-01	15
	SO_2	1-Hr	1ST HIGH	1.58E-03	4.82E-04	1.01E-03	4.61E-03	6.68E-05	8.38E-05	8.73E+00	8.74E+00	1,300
		3- Hr	2ND HIGH	1.43E-03	4.38E-04	9.22E-04	2.79E-03	5.64E-05	7.40E-05	4.97E+00	4.97E+00	1,300
		24- Hr	2ND HIGH	4.73E-04	1.47E-04	3.82E-04	1.11E-03	2.43E-05	1.58E-05	1.53E+00	1.69E+00	260
		ANNUAL	1ST HIGH	1.70E-05	5.23E-06	8.85E-06	5.62E-05	9.34E-07	3.96E-07	1.77E-01	2.09E-01	60
Mt Naomi W Class II Area	NO_2	ANNUAL	1ST HIGH	3.57E-06	2.64E-05	2.11E-05	1.25E-06	6.47E-08	1.99E-08	5.40E-04	1.20E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.42E-03	1.47E-02	8.61E-03	1.73E-03	1.77E-04	5.13E-05	2.16E-01	5.23E+00	150
		ANNUAL	1ST HIGH	8.34E-05	3.82E-04	2.72E-04	4.02E-05	4.69E-06	9.85E-07	8.60E-03	2.23E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.13E-03	1.24E-02	7.05E-03	1.55E-03	9.42E-05	3.62E-05	1.82E-01	3.65E+00	35
		ANNUAL	1ST HIGH	5.50E-05	3.31E-04	2.27E-04	3.54E-05	2.39E-06	7.68E-07	7.59E-03	1.57E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	4.68E-04	1.36E-03	1.02E-03	1.96E-05	2.37E-05	5.26E-01	2.02E+01	1,300
		24- Hr	2ND HIGH	1.44E-04	4.36E-05	1.41E-04	2.08E-04	6.09E-06	7.37E-06	1.21E-01	6.02E+00	260
		ANNUAL	1ST HIGH	4.14E-06	1.27E-06	3.19E-06	4.79E-06	1.37E-07	1.02E-07	3.77E-03	3.75E-01	60
Mt Rushmore Class II Area	NO_2	ANNUAL	1ST HIGH	2.28E-04	1.67E-03	9.52E-04	1.16E-04	7.90E-06	2.31E-06	8.51E-03	2.01E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	9.38E-02	6.07E-02	7.60E-03	1.02E-03	3.47E-04	8.01E-01	6.90E+00	150
		ANNUAL	1ST HIGH	1.87E-03	8.43E-03	5.76E-03	7.38E-04	9.88E-05	2.42E-05	1.07E-01	8.58E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.32E-02	8.27E-02	5.12E-02	6.68E-03	5.03E-04	2.88E-04	6.74E-01	5.37E+00	35
		ANNUAL	1ST HIGH	1.19E-03	7.20E-03	4.77E-03	6.40E-04	4.57E-05	1.88E-05	8.79E-02	5.26E-01	15
	SO_2	3- Hr	2ND HIGH	1.77E-03	5.37E-04	1.56E-03	1.59E-03	8.31E-05	6.78E-05	9.45E-01	6.89E+00	1,300
		24- Hr	2ND HIGH	8.05E-04	2.40E-04	5.59E-04	7.19E-04	3.13E-05	2.65E-05	3.05E-01	2.71E+00	260
		ANNUAL	1ST HIGH	1.05E-04	3.18E-05	7.47E-05	1.06E-04	3.83E-06	2.66E-06	5.78E-02	5.28E-01	60
Popo Agie W Class II Area	NO_2	ANNUAL	1ST HIGH	3.18E-05	2.37E-04	1.49E-04	4.03E-05	2.11E-06	5.54E-07	3.25E-03	9.46E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.73E-02	1.27E-01	6.61E-02	9.51E-03	9.76E-04	3.27E-04	1.30E+00	1.02E+01	150
		ANNUAL	1ST HIGH	7.20E-04	3.35E-03	2.07E-03	5.05E-04	5.67E-05	1.21E-05	6.49E-02	5.52E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.80E-02	1.10E-01	5.57E-02	8.68E-03	5.28E-04	2.67E-04	1.11E+00	8.38E+00	35
		ANNUAL	1ST HIGH	4.76E-04	2.91E-03	1.74E-03	4.43E-04	2.79E-05	9.57E-06	5.60E-02	4.40E-01	15
	SO_2	3- Hr	2ND HIGH	2.97E-03	9.15E-04	3.92E-03	2.73E-03	6.28E-05	9.77E-05	2.30E+00	1.42E+01	1,300
		24- Hr	2ND HIGH	9.11E-04	2.74E-04	7.25E-04	1.05E-03	2.53E-05	2.77E-05	8.84E-01	5.43E+00	260
		ANNUAL	1ST HIGH	3.29E-05	1.03E-05	2.21E-05	6.06E-05	1.60E-06	1.16E-06	3.36E-02	4.87E-01	60

Table C-2 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised- Scenario 1

Receptor Set	*Pollutant*	*Averaging Period*	*RANK*	*Modeled Concentration ($\mu g/m^3$)*								*NAAQS/SAAQS ($\mu g/m^3$)*
				MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
SENSITIVE CLASS II AREAS												
Soldier Creek WA Class II Area	NO_2	ANNUAL	1ST HIGH	1.71E-04	1.25E-03	8.57E-04	7.14E-05	3.89E-06	2.86E-06	7.12E-03	2.43E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.41E-02	6.78E-02	4.70E-02	5.67E-03	5.79E-04	2.91E-04	7.45E-01	7.90E+00	150
		ANNUAL	1ST HIGH	1.44E-03	6.38E-03	4.75E-03	5.65E-04	6.70E-05	2.36E-05	9.04E-02	8.90E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	**9.72E-03**	**6.00E-02**	**4.15E-02**	**5.03E-03**	**3.31E-04**	**2.30E-04**	**6.21E-01**	**6.10E+00**	35
		ANNUAL	1ST HIGH	8.98E-04	5.40E-03	3.89E-03	4.90E-04	3.16E-05	1.80E-05	7.43E-02	5.93E-01	15
	SO_2	3- Hr	2ND HIGH	1.49E-03	4.49E-04	1.51E-03	1.05E-03	5.49E-05	6.45E-05	9.98E-01	9.46E+00	1,300
		24- Hr	2ND HIGH	5.99E-04	1.83E-04	5.30E-04	4.97E-04	1.91E-05	2.50E-05	3.90E-01	3.41E+00	260
		ANNUAL	1ST HIGH	8.45E-05	2.59E-05	6.72E-05	8.10E-05	2.46E-06	2.74E-06	5.39E-02	7.34E-01	60
Wellsville Mountain W Class II Area	NO_2	ANNUAL	1ST HIGH	3.03E-06	2.23E-05	1.76E-05	9.32E-07	4.20E-08	1.38E-08	2.35E-04	1.12E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.22E-03	9.57E-03	6.62E-03	1.73E-03	1.49E-04	4.01E-05	2.04E-01	3.47E+00	150
		ANNUAL	1ST HIGH	6.40E-05	2.94E-04	2.15E-04	2.94E-05	3.28E-06	7.05E-07	5.87E-03	1.81E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.40E-03	8.28E-03	5.72E-03	1.55E-03	7.88E-05	2.79E-05	1.71E-01	2.08E+00	35
		ANNUAL	1ST HIGH	4.23E-05	2.55E-04	1.79E-04	2.58E-05	1.67E-06	5.49E-07	5.13E-03	1.05E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	4.72E-04	1.40E-03	9.36E-04	1.33E-05	1.63E-05	4.99E-01	6.11E+00	1,300
		24- Hr	2ND HIGH	1.01E-04	3.17E-05	1.13E-04	2.10E-04	4.75E-06	4.66E-06	1.10E-01	2.71E+00	260
		ANNUAL	1ST HIGH	3.25E-06	9.95E-07	2.60E-06	3.55E-06	9.55E-08	7.25E-08	2.46E-03	1.50E-01	60
Wind River IR Class II Area	NO_2	ANNUAL	1ST HIGH	1.17E-04	8.72E-04	5.59E-04	3.50E-04	1.84E-05	2.46E-06	1.18E-02	7.34E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.25E-02	1.62E-01	1.24E-01	2.55E-02	2.76E-03	6.04E-04	2.13E+00	1.19E+01	150
		ANNUAL	1ST HIGH	1.46E-03	6.72E-03	4.33E-03	1.50E-03	1.88E-04	3.41E-05	1.39E-01	9.41E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.30E-02	1.45E-01	1.03E-01	2.32E-02	1.43E-03	4.68E-04	1.85E+00	9.80E+00	35
		ANNUAL	1ST HIGH	9.46E-04	5.79E-03	3.61E-03	1.28E-03	8.54E-05	2.66E-05	1.18E-01	6.78E-01	15
	SO_2	3- Hr	2ND HIGH	4.18E-03	1.28E-03	5.54E-03	6.70E-03	1.87E-04	2.03E-04	4.15E+00	**1.84E+02**	1,300
		24- Hr	2ND HIGH	1.29E-03	3.92E-04	1.37E-03	3.04E-03	7.75E-05	6.37E-05	1.81E+00	3.47E+01	260
		ANNUAL	1ST HIGH	7.09E-05	2.22E-05	5.10E-05	2.29E-04	5.86E-06	3.57E-06	9.70E-02	4.99E+00	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Notes:
(1) Bold type with shading indicates a modeled impact that is above the NAAQS/MAAQS
(2) Includes 75% NOx to NO2 conversion
* Area's modeled impacts have excluded receptors within 1-km of a MT CBNG or MTOG Alternative H source

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
NEAR FIELD RECEPTORS												
Montana Near Field Receptors*	NO_2	1-Hr	1ST HIGH	3.31E+01	1.25E+02	5.39E+02	5.29E+01	2.30E+00	1.30E-01	5.39E+02	5.39E+02	565
		ANNUAL	1ST HIGH	2.41E-01	8.44E-01	1.58E+00	4.57E-01	1.34E-02	5.22E-04	1.77E+00	3.00E+00	100
	PM_{10} Total	24-Hr	2ND HIGH	1.13E+00	1.45E+00	5.81E+00	6.67E-01	1.62E-01	4.80E-03	4.68E+01	4.68E+01	150
		ANNUAL	1ST HIGH	1.81E-01	2.16E-01	4.92E-01	9.27E-02	1.87E-02	3.74E-04	2.65E+00	2.87E+00	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	3.68E-01	7.46E-01	2.16E+00	2.68E-01	3.24E-02	3.11E-03	3.04E+00	6.77E+00	35
		ANNUAL	1ST HIGH	5.23E-02	1.04E-01	2.21E-01	3.67E-02	3.89E-03	1.86E-04	4.05E-01	7.81E-01	15
	SO_2	1-Hr	1ST HIGH	3.18E+00	4.72E-01	8.22E+00	8.40E+00	2.31E-01	2.56E-02	1.40E+02	1.40E+02	1,300
		3-Hr	2ND HIGH	9.42E-01	1.40E-01	1.72E+00	3.36E+00	7.27E-02	1.05E-02	4.38E+01	4.39E+01	1,300
		24-Hr	2ND HIGH	1.63E-01	2.43E-02	3.39E-01	5.72E-01	1.12E-02	1.27E-03	1.51E+01	1.51E+01	260
		ANNUAL	1ST HIGH	2.41E-02	3.58E-03	2.48E-02	7.62E-02	7.03E-04	1.06E-04	1.63E+00	1.79E+00	60
Wyoming Near Field Receptors	NO_2	ANNUAL	1ST HIGH	4.84E-02	1.76E-01	2.52E-01	1.18E-02	7.39E-04	3.39E-04	3.97E-01	4.07E+01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.84E-01	4.64E-01	1.49E+00	4.41E-02	3.87E-02	5.47E-03	2.70E+00	1.06E+02	150
		ANNUAL	1ST HIGH	4.70E-02	6.68E-02	1.28E-01	5.45E-03	1.52E-03	3.84E-04	4.36E-01	1.91E+01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.28E-01	3.46E-01	1.07E+00	2.94E-02	1.14E-02	3.89E-03	2.04E+00	1.17E+01	35
		ANNUAL	1ST HIGH	1.70E-02	4.11E-02	7.51E-02	3.53E-03	3.86E-04	2.34E-04	2.53E-01	2.78E+00	15
	SO_2	3-Hr	2ND HIGH	1.46E-01	2.17E-02	1.32E-01	1.11E-01	5.78E-03	2.52E-03	6.71E+00	5.52E+02	1,300
		24-Hr	2ND HIGH	3.17E-02	4.71E-03	3.31E-02	1.82E-02	1.88E-03	6.46E-04	1.84E+00	1.24E+02	260
		ANNUAL	1ST HIGH	5.29E-03	7.89E-04	4.43E-03	2.32E-03	1.00E-04	7.98E-05	2.10E-01	1.72E+01	60
CLASS I AREAS												
Badlands NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.26E-04	8.31E-04	1.01E-03	1.48E-04	1.10E-05	2.84E-06	8.18E-03	1.31E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	1.34E-02	3.41E-02	5.25E-02	5.99E-03	9.94E-04	2.93E-04	7.49E-01	4.13E+00	150
		ANNUAL	1ST HIGH	1.66E-03	3.65E-03	5.02E-03	6.97E-04	1.04E-04	2.18E-05	9.16E-02	6.16E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	9.91E-03	3.10E-02	4.50E-02	5.29E-03	4.67E-04	2.43E-04	6.56E-01	3.48E+00	35
		ANNUAL	1ST HIGH	1.02E-03	3.08E-03	4.09E-03	5.96E-04	4.59E-05	1.66E-05	7.29E-02	4.29E-01	15
	SO_2	3-Hr	2ND HIGH	1.62E-03	2.53E-04	1.52E-03	1.75E-03	8.81E-05	6.13E-05	1.05E+00	8.51E+00	1,300
		24-Hr	2ND HIGH	5.35E-04	8.01E-05	4.54E-04	6.95E-04	3.98E-05	2.15E-05	3.30E-01	2.52E+00	260
		ANNUAL	1ST HIGH	9.56E-05	1.45E-05	6.98E-05	1.08E-04	4.14E-06	2.51E-06	5.55E-02	4.43E-01	60
Bob Marshall W Class I Area	NO_2	1-Hr	1ST HIGH	6.64E-04	2.49E-03	6.44E-03	1.48E-03	2.43E-05	4.87E-05	4.63E+00	4.63E+00	565
		ANNUAL	1ST HIGH	4.96E-07	1.85E-06	3.16E-06	2.33E-06	3.87E-08	1.23E-08	1.53E-02	1.53E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	3.10E-03	6.41E-03	1.25E-02	3.39E-03	3.21E-04	4.22E-05	1.43E+00	1.49E+00	150
		ANNUAL	1ST HIGH	8.62E-05	1.91E-04	2.78E-04	1.13E-04	9.30E-06	1.25E-06	6.29E-02	7.97E-02	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.90E-03	5.72E-03	1.00E-02	3.00E-03	1.20E-04	3.54E-05	8.53E-01	1.12E+00	35
		ANNUAL	1ST HIGH	5.58E-05	1.63E-04	2.30E-04	9.77E-05	4.36E-06	9.32E-07	4.17E-02	5.63E-02	15
	SO_2	1-Hr	1ST HIGH	7.53E-04	1.15E-04	7.35E-04	9.65E-04	3.72E-05	2.57E-05	4.20E+00	4.20E+00	1,300
		3-Hr	2ND HIGH	3.32E-04	5.11E-05	4.06E-04	8.56E-04	2.07E-05	1.58E-05	3.30E+00	3.30E+00	1,300
		24-Hr	2ND HIGH	1.70E-04	2.59E-05	1.52E-04	3.70E-04	8.17E-06	6.50E-06	6.19E-01	1.17E+00	260
		ANNUAL	1ST HIGH	3.97E-06	6.12E-07	3.10E-06	1.36E-05	2.60E-07	1.34E-07	3.85E-02	4.76E-02	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Bridger W Class I Area	NO_2	ANNUAL	1ST HIGH	2.33E-05	8.71E-05	1.14E-04	2.68E-05	1.42E-06	4.24E-07	3.25E-03	9.83E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.54E-02	5.84E-02	5.40E-02	1.14E-02	1.16E-03	2.92E-04	1.28E+00	7.19E+00	150
		ANNUAL	1ST HIGH	6.15E-04	1.44E-03	1.78E-03	4.15E-04	4.51E-05	1.01E-05	5.49E-02	5.19E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.67E-02	5.07E-02	4.58E-02	1.02E-02	6.35E-04	2.39E-04	1.07E+00	5.82E+00	35
		ANNUAL	1ST HIGH	4.09E-04	1.25E-03	1.50E-03	3.68E-04	2.26E-05	8.03E-06	4.76E-02	4.09E-01	15
	SO_2	3-Hr	2ND HIGH	3.07E-03	4.73E-04	4.26E-03	2.91E-03	7.36E-05	1.03E-04	1.96E+00	9.96E+00	1,300
		24-Hr	2ND HIGH	8.35E-04	1.26E-04	5.73E-04	1.03E-03	2.71E-05	2.58E-05	7.57E-01	4.39E+00	260
		ANNUAL	1ST HIGH	2.74E-05	4.29E-06	1.86E-05	4.73E-05	1.26E-06	9.72E-07	2.80E-02	4.37E-01	60
Fitzpatrick W Class I Area	NO_2	ANNUAL	1ST HIGH	2.17E-05	8.25E-05	9.16E-05	5.21E-05	2.77E-06	2.83E-07	3.52E-03	1.62E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.40E-02	5.69E-02	5.76E-02	1.49E-02	1.59E-03	2.21E-04	1.48E+00	6.80E+00	150
		ANNUAL	1ST HIGH	6.14E-04	1.46E-03	1.75E-03	5.91E-04	6.48E-05	1.03E-05	6.61E-02	3.87E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.61E-02	4.97E-02	4.92E-02	1.33E-02	8.01E-04	1.82E-04	1.23E+00	5.86E+00	35
		ANNUAL	1ST HIGH	4.12E-04	1.27E-03	1.49E-03	5.22E-04	3.22E-05	8.22E-06	5.77E-02	3.19E-01	15
	SO_2	3-Hr	2ND HIGH	2.73E-03	4.23E-04	4.01E-03	4.21E-03	1.06E-04	9.96E-05	3.36E+00	1.14E+01	1,300
		24-Hr	2ND HIGH	7.59E-04	1.19E-04	3.89E-04	1.45E-03	3.88E-05	2.04E-05	1.16E+00	4.16E+00	260
		ANNUAL	1ST HIGH	2.58E-05	4.13E-06	1.69E-05	6.86E-05	1.79E-06	8.95E-07	3.73E-02	2.62E-01	60
Fort Peck IR Class I Area	NO_2	1-Hr	1ST HIGH	5.32E-02	1.93E-01	3.12E-01	3.41E-02	1.16E-03	1.05E-03	1.15E+00	7.85E+00	565
		ANNUAL	1ST HIGH	2.53E-04	9.32E-04	8.50E-04	5.12E-04	2.24E-05	2.31E-06	2.66E-02	7.72E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.81E-02	5.69E-02	8.57E-02	1.37E-02	1.34E-03	3.63E-04	8.81E-01	3.82E+00	150
		ANNUAL	1ST HIGH	1.33E-03	2.80E-03	3.32E-03	1.24E-03	1.43E-04	1.24E-05	1.21E-01	2.83E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.55E-02	4.56E-02	7.04E-02	1.15E-02	6.25E-04	2.80E-04	6.56E-01	3.29E+00	35
		ANNUAL	1ST HIGH	7.72E-04	2.29E-03	2.61E-03	1.03E-03	5.80E-05	9.09E-06	7.85E-02	2.07E-01	15
	SO_2	1-Hr	1ST HIGH	6.89E-03	1.02E-03	6.91E-03	7.98E-03	1.39E-04	2.11E-04	3.65E+00	2.41E+01	1,300
		3-Hr	2ND HIGH	3.60E-03	5.36E-04	4.33E-03	5.37E-03	1.10E-04	1.61E-04	2.14E+00	1.83E+01	1,300
		24-Hr	2ND HIGH	1.31E-03	1.99E-04	9.38E-04	2.37E-03	4.50E-05	3.92E-05	6.33E-01	7.01E+00	260
		ANNUAL	1ST HIGH	7.61E-05	1.15E-05	4.70E-05	2.16E-04	5.16E-06	1.52E-06	7.94E-02	3.18E-01	60
Gates of the Mountain W Class I Area	NO_2	1-Hr	1ST HIGH	1.20E-03	4.51E-03	1.02E-02	9.22E-03	1.47E-04	6.11E-05	7.12E+00	7.12E+00	565
		ANNUAL	1ST HIGH	4.44E-06	1.65E-05	9.29E-06	2.81E-05	5.42E-07	2.84E-08	7.10E-02	7.13E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	8.97E-03	2.17E-02	3.11E-02	1.48E-02	9.95E-04	1.10E-04	2.68E+00	2.91E+00	150
		ANNUAL	1ST HIGH	2.55E-04	5.84E-04	6.94E-04	4.11E-04	3.03E-05	3.01E-06	1.83E-01	2.24E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	6.35E-03	1.94E-02	2.75E-02	1.31E-02	5.07E-04	8.84E-05	1.95E+00	2.29E+00	35
		ANNUAL	1ST HIGH	1.68E-04	5.05E-04	5.85E-04	3.57E-04	1.46E-05	2.35E-06	1.19E-01	1.54E-01	15
	SO_2	1-Hr	1ST HIGH	8.23E-04	1.27E-04	9.11E-04	3.70E-03	5.61E-05	3.97E-05	4.28E+00	4.30E+00	1,300
		3-Hr	2ND HIGH	6.16E-04	9.87E-05	5.65E-04	3.03E-03	5.00E-05	1.92E-05	3.47E+00	3.47E+00	1,300
		24-Hr	2ND HIGH	2.97E-04	4.61E-05	2.52E-04	1.50E-03	2.56E-05	8.26E-06	1.65E+00	1.67E+00	260
		ANNUAL	1ST HIGH	1.14E-05	1.75E-06	6.96E-06	5.14E-05	8.64E-07	2.85E-07	1.19E-01	1.42E-01	60
Grand Teton NP Class I Area	NO_2	ANNUAL	1ST HIGH	4.05E-06	1.53E-05	1.58E-05	1.07E-05	5.19E-07	5.94E-08	1.13E-02	3.54E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	1.03E-02	2.44E-02	3.17E-02	5.40E-03	6.46E-04	1.42E-04	7.44E-01	4.04E+00	150
		ANNUAL	1ST HIGH	2.78E-04	6.65E-04	8.87E-04	2.21E-04	2.22E-05	4.33E-06	4.38E-02	2.95E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	7.01E-03	2.14E-02	2.71E-02	4.81E-03	3.32E-04	1.18E-04	6.51E-01	3.33E+00	35
		ANNUAL	1ST HIGH	1.92E-04	5.87E-04	7.62E-04	1.97E-04	1.14E-05	3.51E-06	3.94E-02	2.27E-01	15
	SO_2	3-Hr	2ND HIGH	9.77E-04	1.49E-04	8.61E-04	1.34E-03	3.30E-05	3.42E-05	2.12E+00	5.97E+00	1,300
		24-Hr	2ND HIGH	2.70E-04	4.22E-05	2.39E-04	4.74E-04	1.33E-05	1.18E-05	5.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	1.02E-05	1.60E-06	7.16E-06	2.28E-05	5.87E-07	3.53E-07	2.36E-02	2.92E-01	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
North Absaorka W Class I Area	NO_2	ANNUAL	1ST HIGH	1.19E-04	4.67E-04	2.24E-04	7.47E-04	3.98E-05	6.04E-07	2.15E-02	2.73E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	3.36E-02	8.13E-02	1.47E-01	3.99E-02	5.97E-03	4.25E-04	1.78E+00	6.55E+00	150
		ANNUAL	1ST HIGH	1.32E-03	3.07E-03	3.61E-03	2.11E-03	2.89E-04	1.61E-05	1.41E-01	3.49E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.26E-02	7.13E-02	1.25E-01	3.40E-02	2.44E-03	3.32E-04	1.47E+00	5.35E+00	35
		ANNUAL	1ST HIGH	8.43E-04	2.63E-03	3.03E-03	1.77E-03	1.23E-04	1.26E-05	1.17E-01	2.92E-01	15
	SO_2	3-Hr	2ND HIGH	2.88E-03	4.48E-04	3.38E-03	1.43E-02	3.97E-04	9.47E-05	5.22E+00	7.73E+00	1,300
		24-Hr	2ND HIGH	1.30E-03	2.04E-04	1.26E-03	5.08E-03	1.52E-04	3.82E-05	1.86E+00	3.46E+00	260
		ANNUAL	1ST HIGH	6.29E-05	1.06E-05	3.62E-05	3.50E-04	9.15E-06	1.50E-06	1.09E-01	2.31E-01	60
North Cheyenne IR Class I Area*	NO_2	1-Hr	1ST HIGH	1.22E+01	4.38E+01	4.28E+02	5.08E-01	6.80E-02	2.68E+00	4.28E+02	4.28E+02	565
		ANNUAL	1ST HIGH	6.27E-02	2.28E-01	1.63E+00	3.58E-03	2.11E-04	1.71E-02	1.84E+00	1.92E+00	100
	PM_{10} Total	24-Hr	2ND HIGH	4.29E-01	5.25E-01	3.92E+00	2.24E-02	7.74E-03	6.24E-02	4.48E+00	8.25E+00	150
		ANNUAL	1ST HIGH	5.28E-02	6.88E-02	4.76E-01	3.25E-03	6.23E-04	6.41E-03	8.21E-01	1.24E+00	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.23E-01	2.61E-01	1.72E+00	1.73E-02	1.74E-03	1.69E-02	3.06E+00	5.85E+00	35
		ANNUAL	1ST HIGH	1.66E-02	3.63E-02	1.98E-01	2.44E-03	1.93E-04	1.83E-03	3.90E-01	6.67E-01	15
	SO_2	1-Hr	1ST HIGH	1.17E+00	1.74E-01	6.55E+00	8.80E-02	8.00E-03	4.63E-01	3.07E+01	3.07E+01	1,300
		3-Hr	2ND HIGH	3.83E-01	5.68E-02	1.67E+00	3.98E-02	3.62E-03	2.17E-01	8.55E+00	1.05E+01	1,300
		24-Hr	2ND HIGH	5.78E-02	8.59E-03	2.29E-01	6.13E-03	5.26E-04	2.81E-02	2.73E+00	4.70E+00	260
		ANNUAL	1ST HIGH	6.47E-03	9.78E-04	2.55E-02	8.64E-04	3.22E-05	3.00E-03	4.68E-01	7.21E-01	60
Red Rock Lakes Class I Area	NO_2	1-Hr	1ST HIGH	1.49E-03	5.36E-03	7.30E-04	2.34E-03	8.34E-05	2.07E-05	6.14E+00	6.14E+00	565
		ANNUAL	1ST HIGH	3.26E-06	1.22E-05	2.82E-06	7.09E-06	2.00E-07	2.36E-08	2.45E-02	3.00E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	5.20E-03	1.28E-02	1.70E-02	5.19E-03	5.76E-04	1.01E-04	6.32E-01	1.75E+00	150
		ANNUAL	1ST HIGH	1.71E-04	4.09E-04	5.01E-04	1.63E-04	1.29E-05	2.37E-06	5.44E-02	1.37E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	3.70E-03	1.15E-02	1.44E-02	4.69E-03	3.07E-04	7.93E-05	5.79E-01	1.52E+00	35
		ANNUAL	1ST HIGH	1.18E-04	3.60E-04	4.30E-04	1.45E-04	6.69E-06	1.92E-06	4.68E-02	1.12E-01	15
	SO_2	1-Hr	1ST HIGH	5.67E-04	8.77E-05	3.54E-04	1.62E-03	4.60E-05	2.60E-05	4.98E+00	4.98E+00	1,300
		3-Hr	2ND HIGH	4.91E-04	7.50E-05	3.00E-04	1.19E-03	3.68E-05	1.67E-05	2.56E+00	3.23E+00	1,300
		24-Hr	2ND HIGH	1.80E-04	2.90E-05	1.41E-04	3.82E-04	1.19E-05	6.48E-06	7.30E-01	1.10E+00	260
		ANNUAL	1ST HIGH	6.25E-06	9.72E-07	3.82E-06	1.63E-05	3.32E-07	1.84E-07	3.98E-02	9.60E-02	60
Scapegoat W Class I Area	NO_2	1-Hr	1ST HIGH	1.03E-03	3.90E-03	8.44E-03	2.77E-03	8.00E-05	5.71E-05	3.19E+00	3.19E+00	565
		ANNUAL	1ST HIGH	1.62E-06	6.01E-06	5.66E-06	8.13E-06	1.73E-07	1.84E-08	2.32E-02	2.34E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	5.52E-03	1.33E-02	2.08E-02	6.16E-03	4.44E-04	7.28E-05	2.77E+00	2.82E+00	150
		ANNUAL	1ST HIGH	1.61E-04	3.65E-04	4.75E-04	2.43E-04	1.83E-05	2.12E-06	1.17E-01	1.46E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	3.92E-03	1.19E-02	1.84E-02	5.50E-03	2.29E-04	5.62E-05	1.91E+00	1.91E+00	35
		ANNUAL	1ST HIGH	1.06E-04	3.15E-04	3.98E-04	2.12E-04	8.81E-06	1.62E-06	7.87E-02	1.04E-01	15
	SO_2	1-Hr	1ST HIGH	6.35E-04	1.03E-04	7.65E-04	1.71E-03	3.42E-05	4.44E-05	3.48E+00	4.74E+00	1,300
		3-Hr	2ND HIGH	4.92E-04	7.51E-05	5.00E-04	1.38E-03	2.62E-05	1.92E-05	2.69E+00	2.72E+00	1,300
		24-Hr	2ND HIGH	2.47E-04	3.78E-05	1.86E-04	7.20E-04	1.22E-05	9.12E-06	1.30E+00	1.43E+00	260
		ANNUAL	1ST HIGH	7.23E-06	1.12E-06	4.89E-06	2.93E-05	5.16E-07	2.15E-07	6.57E-02	8.27E-02	60
Teton W Class I Area	NO_2	ANNUAL	1ST HIGH	2.27E-05	8.85E-05	4.14E-05	1.05E-04	5.78E-06	1.69E-07	7.69E-03	2.23E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	1.94E-02	4.73E-02	6.45E-02	2.25E-02	2.82E-03	3.10E-04	1.49E+00	4.66E+00	150
		ANNUAL	1ST HIGH	6.09E-04	1.44E-03	1.73E-03	7.28E-04	8.46E-05	9.00E-06	7.69E-02	2.77E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.36E-02	4.20E-02	5.33E-02	1.95E-02	1.33E-03	2.52E-04	1.24E+00	3.95E+00	35
		ANNUAL	1ST HIGH	4.05E-04	1.25E-03	1.46E-03	6.34E-04	4.04E-05	7.18E-06	6.62E-02	2.33E-01	15
	SO_2	3-Hr	2ND HIGH	1.43E-03	2.25E-04	1.71E-03	9.01E-03	2.27E-04	5.11E-05	2.90E+00	5.92E+00	1,300
		24-Hr	2ND HIGH	6.61E-04	1.10E-04	6.03E-04	2.75E-03	7.61E-05	1.84E-05	1.07E+00	2.55E+00	260
		ANNUAL	1ST HIGH	2.48E-05	4.05E-06	1.55E-05	9.08E-05	2.36E-06	7.49E-07	4.53E-02	1.98E-01	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Theodore Roosevelt NP Class I Area	NO_2	ANNUAL	1ST HIGH	3.96E-04	1.45E-03	1.83E-03	2.99E-04	2.04E-05	4.47E-06	2.88E-02	5.99E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.71E-02	6.63E-02	1.16E-01	2.05E-02	1.79E-03	3.76E-04	1.59E+00	5.65E+00	150
		ANNUAL	1ST HIGH	1.90E-03	4.05E-03	5.89E-03	9.78E-04	1.34E-04	2.26E-05	1.32E-01	4.44E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.85E-02	5.83E-02	9.17E-02	1.84E-02	9.35E-04	2.95E-04	1.24E+00	4.73E+00	35
		ANNUAL	1ST HIGH	1.12E-03	3.35E-03	4.69E-03	8.27E-04	5.58E-05	1.67E-05	9.35E-02	3.32E-01	15
	SO_2	3-Hr	2ND HIGH	2.51E-03	3.75E-04	2.39E-03	2.74E-03	1.25E-04	1.26E-04	2.14E+00	3.66E+01	1,300
		24-Hr	2ND HIGH	1.04E-03	1.57E-04	1.26E-03	1.44E-03	4.77E-05	4.46E-05	1.05E+00	1.09E+01	260
		ANNUAL	1ST HIGH	1.13E-04	1.71E-05	8.50E-05	1.61E-04	5.16E-06	2.81E-06	1.06E-01	8.20E-01	60
UL Bend W Class I Area	NO_2	1-Hr	1ST HIGH	2.42E-02	8.76E-02	1.59E-01	1.08E-01	5.54E-03	3.21E-04	2.30E+00	2.30E+00	565
		ANNUAL	1ST HIGH	1.73E-04	6.33E-04	3.92E-04	1.54E-03	7.16E-05	7.48E-07	5.73E-02	6.20E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.09E-02	4.84E-02	6.82E-02	2.38E-02	2.77E-03	2.03E-04	1.31E+00	2.55E+00	150
		ANNUAL	1ST HIGH	1.10E-03	2.19E-03	2.55E-03	2.01E-03	2.86E-04	9.13E-06	1.84E-01	2.86E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.35E-02	4.18E-02	5.70E-02	1.98E-02	1.24E-03	1.54E-04	1.14E+00	2.35E+00	35
		ANNUAL	1ST HIGH	6.09E-04	1.75E-03	1.96E-03	1.57E-03	1.01E-04	6.36E-06	1.17E-01	1.97E-01	15
	SO_2	1-Hr	1ST HIGH	4.23E-03	6.39E-04	5.60E-03	2.15E-02	5.59E-04	1.42E-04	3.68E+00	1.01E+01	1,300
		3-Hr	2ND HIGH	3.39E-03	5.07E-04	3.43E-03	1.34E-02	2.89E-04	1.17E-04	2.44E+00	5.60E+00	1,300
		24-Hr	2ND HIGH	1.19E-03	1.78E-04	8.88E-04	4.56E-03	1.20E-04	3.12E-05	9.16E-01	2.08E+00	260
		ANNUAL	1ST HIGH	6.99E-05	1.06E-05	4.07E-05	4.74E-04	1.17E-05	1.23E-06	1.35E-01	2.08E-01	60
Washakie W Class I Area	NO_2	ANNUAL	1ST HIGH	9.28E-05	3.67E-04	1.15E-04	5.68E-04	3.18E-05	6.23E-07	1.52E-02	2.45E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	3.18E-02	7.64E-02	1.05E-01	3.69E-02	4.93E-03	4.76E-04	2.14E+00	6.83E+00	150
		ANNUAL	1ST HIGH	1.12E-03	2.62E-03	2.81E-03	1.87E-03	2.53E-04	1.89E-05	1.26E-01	4.17E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.07E-02	6.61E-02	8.86E-02	3.14E-02	2.18E-03	3.85E-04	1.86E+00	5.73E+00	35
		ANNUAL	1ST HIGH	7.19E-04	2.25E-03	2.37E-03	1.57E-03	1.10E-04	1.49E-05	1.05E-01	3.50E-01	15
	SO_2	3-Hr	2ND HIGH	3.23E-03	5.37E-04	2.73E-03	1.95E-02	5.20E-04	1.32E-04	6.75E+00	9.41E+00	1,300
		24-Hr	2ND HIGH	1.17E-03	1.90E-04	9.85E-04	5.42E-03	1.48E-04	3.70E-05	2.19E+00	3.88E+00	260
		ANNUAL	1ST HIGH	5.18E-05	8.84E-06	2.69E-05	2.93E-04	7.80E-06	1.71E-06	9.57E-02	2.77E-01	60
Wind Cave NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.48E-04	9.08E-04	1.17E-03	1.12E-04	7.64E-06	3.13E-06	7.97E-03	1.80E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.00E-02	4.82E-02	6.56E-02	7.64E-03	9.60E-04	3.52E-04	7.82E-01	7.01E+00	150
		ANNUAL	1ST HIGH	1.99E-03	4.49E-03	6.25E-03	7.68E-04	1.03E-04	2.62E-05	1.05E-01	8.65E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.36E-02	4.25E-02	5.66E-02	6.70E-03	4.81E-04	2.91E-04	6.20E-01	5.58E+00	35
		ANNUAL	1ST HIGH	1.26E-03	3.84E-03	5.17E-03	6.68E-04	4.80E-05	2.02E-05	8.57E-02	5.90E-01	15
	SO_2	3-Hr	2ND HIGH	2.33E-03	3.52E-04	1.72E-03	1.77E-03	9.12E-05	7.04E-05	8.66E-01	8.95E+00	1,300
		24-Hr	2ND HIGH	8.68E-04	1.31E-04	5.67E-04	7.60E-04	3.09E-05	2.51E-05	3.77E-01	3.34E+00	260
		ANNUAL	1ST HIGH	1.08E-04	1.65E-05	8.13E-05	1.08E-04	3.90E-06	2.91E-06	5.90E-02	6.51E-01	60
Yellowstone NP Class I Area	NO_2	ANNUAL	1ST HIGH	1.84E-05	7.11E-05	5.62E-05	6.11E-05	2.96E-06	1.91E-07	3.11E-02	3.34E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.37E-02	5.74E-02	1.06E-01	1.33E-02	1.76E-03	4.22E-04	1.45E+00	4.53E+00	150
		ANNUAL	1ST HIGH	6.53E-04	1.55E-03	2.18E-03	6.26E-04	6.31E-05	9.93E-06	1.03E-01	2.57E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.60E-02	5.05E-02	8.99E-02	1.16E-02	8.63E-04	3.29E-04	1.17E+00	3.85E+00	35
		ANNUAL	1ST HIGH	4.40E-04	1.36E-03	1.86E-03	5.50E-04	3.08E-05	7.94E-06	8.87E-02	2.19E-01	15
	SO_2	3-Hr	2ND HIGH	2.62E-03	4.02E-04	2.66E-03	4.65E-03	1.11E-04	7.43E-05	1.68E+00	3.92E+00	1,300
		24-Hr	2ND HIGH	8.64E-04	1.34E-04	8.55E-04	1.91E-03	4.48E-05	3.55E-05	8.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	2.57E-05	4.05E-06	1.95E-05	7.04E-05	1.70E-06	8.23E-07	5.67E-02	1.68E-01	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Absaorka Beartooth W Class II Area	NO_2	1-Hr	1ST HIGH	7.70E-02	2.78E-01	2.26E-01	4.93E+00	3.73E-03	5.33E-04	7.48E+00	7.48E+00	565
		ANNUAL	1ST HIGH	3.64E-04	1.37E-03	5.10E-04	1.34E-02	2.35E-05	1.41E-06	1.01E-01	1.03E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	3.85E-02	9.21E-02	1.85E-01	7.28E-02	6.32E-03	9.25E-04	2.98E+00	5.70E+00	150
		ANNUAL	1ST HIGH	1.97E-03	4.35E-03	5.28E-03	5.18E-03	2.29E-04	2.46E-05	2.45E-01	3.76E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.57E-02	8.04E-02	1.55E-01	4.50E-02	3.05E-03	7.20E-04	2.38E+00	5.20E+00	35
		ANNUAL	1ST HIGH	1.19E-03	3.64E-03	4.38E-03	3.13E-03	9.85E-05	1.86E-05	1.69E-01	3.09E-01	15
	SO_2	1-Hr	1ST HIGH	1.04E-02	1.60E-03	1.16E-02	8.31E-01	4.89E-04	3.92E-04	8.99E+00	9.39E+00	1,300
		3-Hr	2ND HIGH	7.39E-03	1.18E-03	8.18E-03	2.91E-01	3.56E-04	2.62E-04	6.44E+00	7.81E+00	1,300
		24-Hr	2ND HIGH	1.86E-03	2.79E-04	1.62E-03	3.90E-02	1.49E-04	8.27E-05	2.53E+00	3.41E+00	260
		ANNUAL	1ST HIGH	1.09E-04	1.72E-05	5.88E-05	2.64E-03	7.63E-06	2.59E-06	1.85E-01	2.80E-01	60
Agate Fossil Beds NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.12E-04	4.12E-04	5.40E-04	4.80E-05	2.54E-06	2.22E-06	4.70E-03	2.39E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	1.26E-02	3.02E-02	4.10E-02	5.58E-03	6.16E-04	3.32E-04	5.69E-01	8.22E+00	150
		ANNUAL	1ST HIGH	1.15E-03	2.53E-03	3.78E-03	4.77E-04	5.67E-05	2.09E-05	7.57E-02	8.06E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	8.72E-03	2.67E-02	3.60E-02	4.92E-03	3.40E-04	2.67E-04	4.86E-01	6.64E+00	35
		ANNUAL	1ST HIGH	7.15E-04	2.14E-03	3.08E-03	4.13E-04	2.68E-05	1.60E-05	6.26E-02	5.54E-01	15
	SO_2	3-Hr	2ND HIGH	1.59E-03	2.38E-04	1.47E-03	1.49E-03	5.42E-05	7.12E-05	9.20E-01	8.05E+00	1,300
		24-Hr	2ND HIGH	5.36E-04	8.02E-05	4.28E-04	4.84E-04	2.02E-05	2.47E-05	3.67E-01	3.20E+00	260
		ANNUAL	1ST HIGH	6.81E-05	1.04E-05	5.44E-05	6.84E-05	2.04E-06	2.42E-06	4.63E-02	7.22E-01	60
Big Horn Canyon NRA Class II Area	NO_2	1-Hr	1ST HIGH	1.67E-01	5.97E-01	1.68E+00	8.08E-02	6.03E-03	1.94E+00	5.59E+01	6.50E+01	565
		ANNUAL	1ST HIGH	2.42E-03	9.01E-03	2.11E-02	2.00E-03	8.76E-05	4.74E-03	4.77E-01	5.20E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	9.97E-02	2.12E-01	4.51E-01	1.88E-02	2.51E-03	6.54E-02	1.58E+01	1.60E+01	150
		ANNUAL	1ST HIGH	6.72E-03	1.34E-02	3.05E-02	2.61E-03	3.58E-04	2.98E-03	1.31E+00	1.67E+00	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	5.76E-02	1.77E-01	3.53E-01	1.53E-02	1.06E-03	2.91E-02	2.84E+00	5.33E+00	35
		ANNUAL	1ST HIGH	3.60E-03	1.05E-02	2.26E-02	2.05E-03	1.31E-04	1.42E-03	2.69E-01	5.04E-01	15
	SO_2	1-Hr	1ST HIGH	2.61E-02	4.14E-03	3.23E-02	1.81E-02	6.40E-04	3.14E-01	2.33E+01	2.69E+01	1,300
		3-Hr	2ND HIGH	1.43E-02	2.26E-03	2.67E-02	1.15E-02	4.59E-04	1.14E-01	1.24E+01	1.31E+01	1,300
		24-Hr	2ND HIGH	6.05E-03	9.47E-04	8.72E-03	3.51E-03	9.98E-05	1.70E-02	2.96E+00	4.79E+00	260
		ANNUAL	1ST HIGH	4.57E-04	7.29E-05	5.76E-04	6.26E-04	1.47E-05	8.40E-04	4.43E-01	6.11E-01	60
Black Elk W Class II Area	NO_2	ANNUAL	1ST HIGH	2.25E-04	8.28E-04	9.70E-04	1.13E-04	7.71E-06	2.30E-06	7.76E-03	1.78E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.02E-02	4.88E-02	6.12E-02	7.54E-03	1.03E-03	3.60E-04	7.71E-01	6.72E+00	150
		ANNUAL	1ST HIGH	1.88E-03	4.22E-03	5.77E-03	7.37E-04	9.84E-05	2.42E-05	1.03E-01	8.20E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.38E-02	4.30E-02	5.29E-02	6.63E-03	4.96E-04	2.99E-04	6.45E-01	5.29E+00	35
		ANNUAL	1ST HIGH	1.19E-03	3.61E-03	4.78E-03	6.40E-04	4.56E-05	1.88E-05	8.44E-02	5.30E-01	15
	SO_2	3-Hr	2ND HIGH	1.79E-03	2.71E-04	1.58E-03	1.60E-03	8.50E-05	6.62E-05	9.42E-01	6.85E+00	1,300
		24-Hr	2ND HIGH	8.03E-04	1.20E-04	5.55E-04	7.18E-04	3.23E-05	2.69E-05	3.07E-01	2.80E+00	260
		ANNUAL	1ST HIGH	1.04E-04	1.59E-05	7.46E-05	1.05E-04	3.80E-06	2.65E-06	5.79E-02	5.44E-01	60
Cloud Peak Class II Area	NO_2	ANNUAL	1ST HIGH	1.09E-03	3.94E-03	6.77E-03	2.97E-04	7.50E-06	3.53E-05	2.89E-02	6.09E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	1.53E-01	3.63E-01	6.57E-01	2.07E-02	2.10E-03	1.23E-03	2.02E+00	6.16E+00	150
		ANNUAL	1ST HIGH	4.73E-03	1.02E-02	1.94E-02	1.14E-03	1.12E-04	1.02E-04	1.78E-01	5.49E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.04E-01	3.20E-01	5.59E-01	1.84E-02	1.03E-03	9.57E-04	1.69E+00	4.86E+00	35
		ANNUAL	1ST HIGH	2.86E-03	8.52E-03	1.56E-02	9.70E-04	5.17E-05	7.25E-05	1.36E-01	4.15E-01	15
	SO_2	3-Hr	2ND HIGH	2.01E-02	3.04E-03	1.35E-02	8.99E-03	1.45E-04	3.61E-04	1.82E+00	5.04E+00	1,300
		24-Hr	2ND HIGH	6.29E-03	9.58E-04	5.60E-03	2.07E-03	5.68E-05	1.01E-04	5.97E-01	2.54E+00	260
		ANNUAL	1ST HIGH	2.47E-04	3.83E-05	2.49E-04	1.72E-04	3.64E-06	1.50E-05	9.77E-02	2.71E-01	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Crow IR Class II Area*	NO_2	1-Hr	1ST HIGH	4.38E+01	1.66E+02	3.22E+02	7.88E+01	1.46E+00	1.15E+01	**1.59E+03**	**1.59E+03**	565
		ANNUAL	1ST HIGH	1.10E-01	4.15E-01	1.64E+00	1.12E-01	2.34E-03	4.64E-02	7.08E+00	7.13E+00	100
	PM_{10} Total	24-Hr	2ND HIGH	9.78E-01	1.21E+00	4.59E+00	4.59E-01	6.05E-02	2.39E-01	**2.04E+02**	**2.05E+02**	150
		ANNUAL	1ST HIGH	8.58E-02	1.11E-01	4.93E-01	2.50E-02	3.60E-03	1.83E-02	1.51E+01	1.54E+01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.63E-01	5.29E-01	1.80E+00	1.70E-01	1.22E-02	9.30E-02	4.18E+00	7.55E+00	35
		ANNUAL	1ST HIGH	2.48E-02	5.56E-02	2.11E-01	1.09E-02	8.10E-04	6.15E-03	4.26E-01	7.66E-01	15
	SO_2	1-Hr	1ST HIGH	4.21E+00	6.25E-01	4.93E+00	1.27E+01	5.06E-02	1.88E+00	2.54E+02	2.54E+02	1,300
		3-Hr	2ND HIGH	9.95E-01	1.48E-01	1.50E+00	2.14E+00	1.80E-02	4.11E-01	1.06E+02	1.06E+02	1,300
		24-Hr	2ND HIGH	1.31E-01	1.95E-02	2.74E-01	3.96E-01	2.56E-03	8.78E-02	1.59E+01	1.65E+01	260
		ANNUAL	1ST HIGH	1.11E-02	2.27E-03	2.57E-02	1.91E-02	1.49E-04	7.45E-03	2.45E+00	2.62E+00	60
Devils Tower NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.93E-03	7.08E-03	6.35E-03	9.27E-04	7.15E-05	1.49E-05	3.39E-02	5.12E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	3.79E-02	7.45E-02	1.22E-01	8.43E-03	1.95E-03	4.83E-04	9.34E-01	5.35E+00	150
		ANNUAL	1ST HIGH	4.69E-03	9.27E-03	1.17E-02	1.37E-03	2.65E-04	4.58E-05	1.49E-01	1.16E+00	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.98E-02	5.97E-02	1.05E-01	7.37E-03	7.21E-04	3.95E-04	8.15E-01	4.23E+00	35
		ANNUAL	1ST HIGH	2.51E-03	7.30E-03	9.05E-03	1.10E-03	9.53E-05	3.32E-05	1.13E-01	5.60E-01	15
	SO_2	3-Hr	2ND HIGH	5.88E-03	8.74E-04	3.78E-03	4.61E-03	3.62E-04	2.66E-04	1.59E+00	1.53E+01	1,300
		24-Hr	2ND HIGH	2.49E-03	3.73E-04	1.42E-03	1.38E-03	1.05E-04	6.70E-05	6.24E-01	5.61E+00	260
		ANNUAL	1ST HIGH	3.55E-04	5.36E-05	2.12E-04	3.09E-04	1.40E-05	6.52E-06	9.96E-02	9.70E-01	60
Fort Belknap IR Class II Area	NO_2	1-Hr	1ST HIGH	1.42E-02	5.44E-02	1.28E-01	4.13E-02	2.36E-03	1.44E-04	3.46E+00	3.46E+00	565
		ANNUAL	1ST HIGH	7.12E-05	2.64E-04	1.70E-04	4.89E-04	2.35E-05	2.64E-07	8.46E-02	8.63E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	1.91E-02	4.50E-02	8.00E-02	1.71E-02	1.74E-03	2.97E-04	1.21E+00	2.35E+00	150
		ANNUAL	1ST HIGH	7.21E-04	1.46E-03	1.80E-03	1.12E-03	1.49E-04	6.57E-06	1.84E-01	2.57E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.26E-02	3.92E-02	6.66E-02	1.45E-02	7.09E-04	2.45E-04	1.03E+00	2.18E+00	35
		ANNUAL	1ST HIGH	4.10E-04	1.18E-03	1.39E-03	8.98E-04	5.69E-05	4.76E-06	1.10E-01	1.72E-01	15
	SO_2	1-Hr	1ST HIGH	4.01E-03	6.01E-04	3.92E-03	9.13E-03	2.80E-04	1.52E-04	3.09E+00	7.62E+00	1,300
		3-Hr	2ND HIGH	2.81E-03	4.25E-04	2.45E-03	6.76E-03	2.04E-04	7.61E-05	2.11E+00	5.53E+00	1,300
		24-Hr	2ND HIGH	1.11E-03	1.65E-04	7.63E-04	2.47E-03	6.89E-05	2.36E-05	6.99E-01	1.81E+00	260
		ANNUAL	1ST HIGH	4.36E-05	6.60E-06	2.78E-05	2.18E-04	5.58E-06	8.54E-07	1.47E-01	1.92E-01	60
Fort Laramie NHS Class II Area	NO_2	ANNUAL	1ST HIGH	8.12E-05	3.00E-04	4.22E-04	3.54E-05	1.85E-06	1.87E-06	3.19E-03	3.58E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	1.33E-02	3.35E-02	4.23E-02	5.58E-03	7.07E-04	1.94E-04	5.60E-01	7.42E+00	150
		ANNUAL	1ST HIGH	1.03E-03	2.28E-03	3.24E-03	4.35E-04	5.28E-05	1.87E-05	6.83E-02	9.48E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	9.25E-03	2.92E-02	3.58E-02	4.88E-03	3.46E-04	1.50E-04	4.77E-01	5.56E+00	35
		ANNUAL	1ST HIGH	6.46E-04	1.94E-03	2.65E-03	3.79E-04	2.54E-05	1.44E-05	5.69E-02	6.15E-01	15
	SO_2	3-Hr	2ND HIGH	1.90E-03	2.90E-04	1.52E-03	1.63E-03	6.85E-05	1.11E-04	9.22E-01	1.66E+01	1,300
		24-Hr	2ND HIGH	5.69E-04	8.62E-05	4.19E-04	6.00E-04	2.05E-05	2.31E-05	3.51E-01	4.23E+00	260
		ANNUAL	1ST HIGH	5.76E-05	8.84E-06	4.47E-05	5.92E-05	1.81E-06	2.12E-06	3.86E-02	9.21E-01	60
Jedediah Smith W Class II Area	NO_2	ANNUAL	1ST HIGH	2.67E-06	1.01E-05	9.35E-06	7.86E-06	3.67E-07	4.16E-08	1.17E-02	4.32E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	8.55E-03	2.09E-02	2.96E-02	3.62E-03	4.54E-04	1.33E-04	6.83E-01	3.55E+00	150
		ANNUAL	1ST HIGH	2.21E-04	5.29E-04	6.97E-04	1.72E-04	1.63E-05	3.32E-06	4.54E-02	3.18E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	6.15E-03	1.87E-02	2.52E-02	3.28E-03	2.45E-04	1.10E-04	5.88E-01	3.02E+00	35
		ANNUAL	1ST HIGH	1.53E-04	4.68E-04	5.99E-04	1.53E-04	8.45E-06	2.70E-06	4.07E-02	2.39E-01	15
	SO_2	3-Hr	2ND HIGH	8.76E-04	1.33E-04	6.46E-04	1.01E-03	2.44E-05	2.92E-05	2.31E+00	6.67E+00	1,300
		24-Hr	2ND HIGH	2.22E-04	3.49E-05	2.22E-04	3.83E-04	1.14E-05	1.07E-05	5.48E-01	2.08E+00	260
		ANNUAL	1ST HIGH	7.85E-06	1.22E-06	5.33E-06	1.74E-05	4.27E-07	2.73E-07	2.45E-02	3.53E-01	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Jewel Cave NM Class II Area	NO_2	ANNUAL	1ST HIGH	3.01E-04	1.10E-03	1.45E-03	1.06E-04	6.25E-06	3.79E-06	9.34E-03	2.06E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.27E-02	5.26E-02	7.11E-02	7.93E-03	9.39E-04	3.33E-04	7.53E-01	6.69E+00	150
		ANNUAL	1ST HIGH	2.00E-03	4.46E-03	6.38E-03	7.21E-04	9.04E-05	2.70E-05	1.06E-01	8.93E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.52E-02	4.73E-02	6.25E-02	7.23E-03	4.98E-04	2.75E-04	6.34E-01	5.19E+00	35
		ANNUAL	1ST HIGH	1.26E-03	3.80E-03	5.26E-03	6.27E-04	4.22E-05	2.08E-05	8.69E-02	5.77E-01	15
	SO_2	3-Hr	2ND HIGH	2.41E-03	3.64E-04	1.59E-03	1.52E-03	8.31E-05	6.52E-05	7.08E-01	7.28E+00	1,300
		24-Hr	2ND HIGH	9.13E-04	1.39E-04	5.85E-04	7.00E-04	3.38E-05	2.71E-05	4.20E-01	2.77E+00	260
		ANNUAL	1ST HIGH	1.13E-04	1.72E-05	8.57E-05	9.99E-05	3.35E-06	3.01E-06	6.09E-02	7.43E-01	60
Lee Metcalf W Class II Area	NO_2	1-Hr	1ST HIGH	2.27E-03	8.18E-03	5.97E-03	6.62E-03	2.40E-04	4.77E-05	1.16E+01	1.16E+01	565
		ANNUAL	1ST HIGH	1.54E-05	5.70E-05	1.11E-05	3.68E-05	8.38E-07	4.40E-08	1.50E-01	1.51E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	1.28E-02	3.03E-02	4.94E-02	1.38E-02	8.85E-04	2.83E-04	2.57E+00	3.43E+00	150
		ANNUAL	1ST HIGH	3.98E-04	9.34E-04	1.03E-03	4.87E-04	3.39E-05	4.83E-06	2.05E-01	2.61E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	8.41E-03	2.64E-02	4.15E-02	1.23E-02	4.58E-04	2.35E-04	2.21E+00	2.88E+00	35
		ANNUAL	1ST HIGH	2.66E-04	8.16E-04	8.80E-04	4.29E-04	1.71E-05	3.86E-06	1.61E-01	2.08E-01	15
	SO_2	1-Hr	1ST HIGH	1.58E-03	2.41E-04	1.01E-03	4.61E-03	6.68E-05	8.38E-05	8.73E+00	8.74E+00	1,300
		3-Hr	2ND HIGH	1.43E-03	2.19E-04	9.22E-04	2.79E-03	5.64E-05	7.40E-05	4.97E+00	4.97E+00	1,300
		24-Hr	2ND HIGH	4.73E-04	7.37E-05	3.82E-04	1.11E-03	2.43E-05	1.58E-05	1.53E+00	1.69E+00	260
		ANNUAL	1ST HIGH	1.70E-05	2.62E-06	8.85E-06	5.62E-05	9.34E-07	3.96E-07	1.77E-01	2.09E-01	60
Mt Naomi W Class II Area	NO_2	ANNUAL	1ST HIGH	3.57E-06	1.32E-05	2.11E-05	1.25E-06	6.47E-08	1.99E-08	5.28E-04	1.20E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	3.42E-03	7.36E-03	8.61E-03	1.73E-03	1.77E-04	5.13E-05	2.12E-01	5.23E+00	150
		ANNUAL	1ST HIGH	8.34E-05	1.91E-04	2.72E-04	4.02E-05	4.69E-06	9.85E-07	8.41E-03	2.23E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.13E-03	6.20E-03	7.05E-03	1.55E-03	9.42E-05	3.62E-05	1.78E-01	3.65E+00	35
		ANNUAL	1ST HIGH	5.50E-05	1.66E-04	2.27E-04	3.54E-05	2.39E-06	7.68E-07	7.43E-03	1.57E-01	15
	SO_2	3-Hr	2ND HIGH	1.57E-03	2.34E-04	1.36E-03	1.02E-03	1.96E-05	2.37E-05	5.26E-01	2.02E+01	1,300
		24-Hr	2ND HIGH	1.44E-04	2.18E-05	1.41E-04	2.08E-04	6.09E-06	7.37E-06	1.21E-01	6.02E+00	260
		ANNUAL	1ST HIGH	4.14E-06	6.37E-07	3.19E-06	4.79E-06	1.37E-07	1.02E-07	3.77E-03	3.75E-01	60
Mt Rushmore Class II Area	NO_2	ANNUAL	1ST HIGH	2.28E-04	8.37E-04	9.52E-04	1.16E-04	7.90E-06	2.31E-06	7.67E-03	2.00E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	1.94E-02	4.69E-02	6.07E-02	7.60E-03	1.02E-03	3.47E-04	7.45E-01	6.88E+00	150
		ANNUAL	1ST HIGH	1.87E-03	4.21E-03	5.76E-03	7.38E-04	9.88E-05	2.42E-05	1.03E-01	8.54E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.32E-02	4.14E-02	5.12E-02	6.68E-03	5.03E-04	2.88E-04	6.23E-01	5.32E+00	35
		ANNUAL	1ST HIGH	1.19E-03	3.60E-03	4.77E-03	6.40E-04	4.57E-05	1.88E-05	8.43E-02	5.23E-01	15
	SO_2	3-Hr	2ND HIGH	1.77E-03	2.68E-04	1.56E-03	1.59E-03	8.31E-05	6.78E-05	9.45E-01	6.89E+00	1,300
		24-Hr	2ND HIGH	8.05E-04	1.20E-04	5.59E-04	7.19E-04	3.13E-05	2.65E-05	3.05E-01	2.71E+00	260
		ANNUAL	1ST HIGH	1.05E-04	1.59E-05	7.47E-05	1.06E-04	3.83E-06	2.66E-06	5.78E-02	5.28E-01	60
Popo Agie W Class II Area	NO_2	ANNUAL	1ST HIGH	3.18E-05	1.19E-04	1.49E-04	4.03E-05	2.11E-06	5.54E-07	3.13E-03	9.45E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.73E-02	6.34E-02	6.61E-02	9.51E-03	9.76E-04	3.27E-04	1.28E+00	1.01E+01	150
		ANNUAL	1ST HIGH	7.20E-04	1.68E-03	2.07E-03	5.05E-04	5.67E-05	1.21E-05	6.32E-02	5.51E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.80E-02	5.50E-02	5.57E-02	8.68E-03	5.28E-04	2.67E-04	1.10E+00	8.37E+00	35
		ANNUAL	1ST HIGH	4.76E-04	1.46E-03	1.74E-03	4.43E-04	2.79E-05	9.57E-06	5.45E-02	4.39E-01	15
	SO_2	3-Hr	2ND HIGH	2.97E-03	4.57E-04	3.92E-03	2.73E-03	6.28E-05	9.77E-05	2.30E+00	1.42E+01	1,300
		24-Hr	2ND HIGH	9.11E-04	1.37E-04	7.25E-04	1.05E-03	2.53E-05	2.77E-05	8.84E-01	5.43E+00	260
		ANNUAL	1ST HIGH	3.29E-05	5.14E-06	2.21E-05	6.06E-05	1.60E-06	1.16E-06	3.36E-02	4.87E-01	60

Table C-3 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised - Scenario 1A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Soldier Creek WA Class II Area	NO_2	ANNUAL	1ST HIGH	1.71E-04	6.26E-04	8.57E-04	7.14E-05	3.89E-06	2.86E-06	6.50E-03	2.42E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	1.41E-02	3.39E-02	4.70E-02	5.67E-03	5.79E-04	2.91E-04	7.21E-01	7.90E+00	150
		ANNUAL	1ST HIGH	1.44E-03	3.19E-03	4.75E-03	5.65E-04	6.70E-05	2.36E-05	8.73E-02	8.87E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	9.72E-03	3.00E-02	4.15E-02	5.03E-03	3.31E-04	2.30E-04	6.00E-01	6.08E+00	35
		ANNUAL	1ST HIGH	8.98E-04	2.70E-03	3.89E-03	4.90E-04	3.16E-05	1.80E-05	7.16E-02	5.90E-01	15
	SO_2	3-Hr	2ND HIGH	1.49E-03	2.25E-04	1.51E-03	1.05E-03	5.49E-05	6.45E-05	9.98E-01	9.46E+00	1,300
		24-Hr	2ND HIGH	5.99E-04	9.15E-05	5.30E-04	4.97E-04	1.91E-05	2.50E-05	3.89E-01	3.41E+00	260
		ANNUAL	1ST HIGH	8.45E-05	1.29E-05	6.72E-05	8.10E-05	2.46E-06	2.74E-06	5.39E-02	7.34E-01	60
Wellsville Mountain W Class II Area	NO_2	ANNUAL	1ST HIGH	3.03E-06	1.12E-05	1.76E-05	9.32E-07	4.20E-08	1.38E-08	2.24E-04	1.12E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.22E-03	4.79E-03	6.62E-03	1.73E-03	1.49E-04	4.01E-05	2.00E-01	3.47E+00	150
		ANNUAL	1ST HIGH	6.40E-05	1.47E-04	2.15E-04	2.94E-05	3.28E-06	7.05E-07	5.73E-03	1.80E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.40E-03	4.14E-03	5.72E-03	1.55E-03	7.88E-05	2.79E-05	1.67E-01	2.08E+00	35
		ANNUAL	1ST HIGH	4.23E-05	1.28E-04	1.79E-04	2.58E-05	1.67E-06	5.49E-07	5.01E-03	1.05E-01	15
	SO_2	3-Hr	2ND HIGH	1.57E-03	2.36E-04	1.40E-03	9.36E-04	1.33E-05	1.63E-05	4.99E-01	6.11E+00	1,300
		24-Hr	2ND HIGH	1.01E-04	1.59E-05	1.13E-04	2.10E-04	4.75E-06	4.66E-06	1.10E-01	2.71E+00	260
		ANNUAL	1ST HIGH	3.25E-06	4.97E-07	2.60E-06	3.55E-06	9.55E-08	7.25E-08	2.46E-03	1.50E-01	60
Wind River IR Class II Area	NO_2	ANNUAL	1ST HIGH	1.17E-04	4.36E-04	5.59E-04	3.50E-04	1.84E-05	2.46E-06	1.15E-02	7.34E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	3.25E-02	8.10E-02	1.24E-01	2.55E-02	2.76E-03	6.04E-04	2.05E+00	1.18E+01	150
		ANNUAL	1ST HIGH	1.46E-03	3.36E-03	4.33E-03	1.50E-03	1.88E-04	3.41E-05	1.37E-01	9.38E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.30E-02	7.26E-02	1.03E-01	2.32E-02	1.43E-03	4.68E-04	1.78E+00	9.78E+00	35
		ANNUAL	1ST HIGH	9.46E-04	2.90E-03	3.61E-03	1.28E-03	8.54E-05	2.66E-05	1.15E-01	6.75E-01	15
	SO_2	3-Hr	2ND HIGH	4.18E-03	6.42E-04	5.54E-03	6.70E-03	1.87E-04	2.03E-04	4.15E+00	1.84E+02	1,300
		24-Hr	2ND HIGH	1.29E-03	1.96E-04	1.37E-03	3.04E-03	7.75E-05	6.37E-05	1.81E+00	3.47E+01	260
		ANNUAL	1ST HIGH	7.09E-05	1.11E-05	5.10E-05	2.29E-04	5.86E-06	3.57E-06	9.70E-02	4.99E+00	60

able C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Notes:
(1) Bold type indicate a modeled impact that is above the NAAQS/SAAQS
(2) Includes 75% NOx to NO2 conversion
* Area's modeled impacts have excluded receptors within 1-km of a MT CBNG or MTOG Alternative H source

Receptor Set	*Pollutant*	*Averaging Period*	*RANK*	*Modeled Concentration ($\mu g/m^3$)*								*NAAQS/SAAQS ($\mu g/m^3$)*
				MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
NEAR FIELD RECEPTORS												
Montana Near Field Receptors*	NO_2	1-Hr	1ST HIGH	3.31E+01	1.70E+02	5.39E+02	5.29E+01	2.30E+00	1.30E-01	5.40E+02	5.40E+02	565
		ANNUAL	1ST HIGH	2.41E-01	1.15E+00	1.58E+00	4.57E-01	1.34E-02	5.22E-04	1.79E+00	3.11E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	1.13E+00	2.62E+00	5.81E+00	6.67E-01	1.62E-01	4.80E-03	4.68E+01	4.68E+01	150
		ANNUAL	1ST HIGH	1.81E-01	4.08E-01	4.92E-01	9.27E-02	1.87E-02	3.74E-04	2.66E+00	2.87E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.68E-01	1.23E+00	2.16E+00	2.68E-01	3.24E-02	3.11E-03	3.08E+00	6.90E+00	35
		ANNUAL	1ST HIGH	5.23E-02	1.83E-01	2.21E-01	3.67E-02	3.89E-03	1.86E-04	4.41E-01	8.29E-01	15
	SO_2	1-Hr	1ST HIGH	3.18E+00	9.44E-01	8.22E+00	8.40E+00	2.31E-01	2.56E-02	1.40E+02	1.40E+02	1,300
		3- Hr	2ND HIGH	9.42E-01	2.80E-01	1.72E+00	3.36E+00	7.27E-02	1.05E-02	4.38E+01	4.39E+01	1,300
		24- Hr	2ND HIGH	1.63E-01	4.86E-02	3.39E-01	5.72E-01	1.12E-02	1.27E-03	1.51E+01	1.51E+01	260
		ANNUAL	1ST HIGH	2.41E-02	7.17E-03	2.48E-02	7.62E-02	7.03E-04	1.06E-04	1.63E+00	1.79E+00	60
Wyoming Near Field Receptors	NO_2	ANNUAL	1ST HIGH	4.84E-02	2.39E-01	2.52E-01	1.18E-02	7.39E-04	3.39E-04	4.36E-01	4.07E+01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.84E-01	7.60E-01	1.49E+00	4.41E-02	3.87E-02	5.47E-03	2.88E+00	1.06E+02	150
		ANNUAL	1ST HIGH	4.70E-02	1.19E-01	1.28E-01	5.45E-03	1.52E-03	3.84E-04	4.62E-01	1.91E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.28E-01	5.24E-01	1.07E+00	2.94E-02	1.14E-02	3.89E-03	2.15E+00	1.18E+01	35
		ANNUAL	1ST HIGH	1.70E-02	6.56E-02	7.51E-02	3.53E-03	3.86E-04	2.34E-04	2.73E-01	2.78E+00	15
	SO_2	3- Hr	2ND HIGH	1.46E-01	4.34E-02	1.32E-01	1.11E-01	5.78E-03	2.52E-03	6.71E+00	5.52E+02	1,300
		24- Hr	2ND HIGH	3.17E-02	9.42E-03	3.31E-02	1.82E-02	1.88E-03	6.46E-04	1.84E+00	1.24E+02	260
		ANNUAL	1ST HIGH	5.29E-03	1.58E-03	4.43E-03	2.32E-03	1.00E-04	7.98E-05	2.11E-01	1.72E+01	60
CLASS I AREAS												
Badlands NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.26E-04	1.13E-03	1.01E-03	1.48E-04	1.10E-05	2.84E-06	8.47E-03	1.31E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.34E-02	5.00E-02	5.25E-02	5.99E-03	9.94E-04	2.93E-04	7.60E-01	4.14E+00	150
		ANNUAL	1ST HIGH	1.66E-03	5.61E-03	5.02E-03	6.97E-04	1.04E-04	2.18E-05	9.35E-02	6.18E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.91E-03	4.38E-02	4.50E-02	5.29E-03	4.67E-04	2.43E-04	6.65E-01	3.49E+00	35
		ANNUAL	1ST HIGH	1.02E-03	4.46E-03	4.09E-03	5.96E-04	4.59E-05	1.66E-05	7.43E-02	4.30E-01	15
	SO_2	3- Hr	2ND HIGH	1.62E-03	5.05E-04	1.52E-03	1.75E-03	8.81E-05	6.13E-05	1.05E+00	8.51E+00	1,300
		24- Hr	2ND HIGH	5.35E-04	1.60E-04	4.54E-04	6.95E-04	3.98E-05	2.15E-05	3.30E-01	2.52E+00	260
		ANNUAL	1ST HIGH	9.56E-05	2.91E-05	6.98E-05	1.08E-04	4.14E-06	2.51E-06	5.55E-02	4.43E-01	60
Bob Marshall W Class I Area	NO_2	1-Hr	1ST HIGH	6.64E-04	3.38E-03	6.44E-03	1.48E-03	2.43E-05	4.87E-05	4.63E+00	4.63E+00	565
		ANNUAL	1ST HIGH	4.96E-07	2.51E-06	3.16E-06	2.33E-06	3.87E-08	1.23E-08	1.53E-02	1.53E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.10E-03	9.71E-03	1.25E-02	3.39E-03	3.21E-04	4.22E-05	1.43E+00	1.49E+00	150
		ANNUAL	1ST HIGH	8.62E-05	2.91E-04	2.78E-04	1.13E-04	9.30E-06	1.25E-06	6.30E-02	7.98E-02	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.90E-03	8.18E-03	1.00E-02	3.00E-03	1.20E-04	3.54E-05	8.55E-01	1.12E+00	35
		ANNUAL	1ST HIGH	5.58E-05	2.37E-04	2.30E-04	9.77E-05	4.36E-06	9.32E-07	4.18E-02	5.64E-02	15
	SO_2	1-Hr	1ST HIGH	7.53E-04	2.30E-04	7.35E-04	9.65E-04	3.72E-05	2.57E-05	4.20E+00	4.20E+00	1,300
		3- Hr	2ND HIGH	3.32E-04	1.02E-04	4.06E-04	8.56E-04	2.07E-05	1.58E-05	3.30E+00	3.30E+00	1,300
		24- Hr	2ND HIGH	1.70E-04	5.18E-05	1.52E-04	3.70E-04	8.17E-06	6.50E-06	6.19E-01	1.17E+00	260
		ANNUAL	1ST HIGH	3.97E-06	1.22E-06	3.10E-06	1.36E-05	2.60E-07	1.34E-07	3.85E-02	4.76E-02	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Bridger W Class I Area	NO_2	ANNUAL	1ST HIGH	2.33E-05	1.18E-04	1.14E-04	2.68E-05	1.42E-06	4.24E-07	3.27E-03	9.83E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.54E-02	8.81E-02	5.40E-02	1.14E-02	1.16E-03	2.92E-04	1.30E+00	7.19E+00	150
		ANNUAL	1ST HIGH	6.15E-04	2.17E-03	1.78E-03	4.15E-04	4.51E-05	1.01E-05	5.56E-02	5.20E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.67E-02	7.26E-02	4.58E-02	1.02E-02	6.35E-04	2.39E-04	1.09E+00	5.82E+00	35
		ANNUAL	1ST HIGH	4.09E-04	1.79E-03	1.50E-03	3.68E-04	2.26E-05	8.03E-06	4.81E-02	4.10E-01	15
	SO_2	3- Hr	2ND HIGH	3.07E-03	9.47E-04	4.26E-03	2.91E-03	7.36E-05	1.03E-04	1.96E+00	9.96E+00	1,300
		24- Hr	2ND HIGH	8.35E-04	2.52E-04	5.73E-04	1.03E-03	2.71E-05	2.58E-05	7.57E-01	4.39E+00	260
		ANNUAL	1ST HIGH	2.74E-05	8.57E-06	1.86E-05	4.73E-05	1.26E-06	9.72E-07	2.80E-02	4.37E-01	60
Fitzpatrick W Class I Area	NO_2	ANNUAL	1ST HIGH	2.17E-05	1.12E-04	9.16E-05	5.21E-05	2.77E-06	2.83E-07	3.55E-03	1.62E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.40E-02	8.54E-02	5.76E-02	1.49E-02	1.59E-03	2.21E-04	1.51E+00	6.80E+00	150
		ANNUAL	1ST HIGH	6.14E-04	2.19E-03	1.75E-03	5.91E-04	6.48E-05	1.03E-05	6.68E-02	3.88E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.61E-02	7.11E-02	4.92E-02	1.33E-02	8.01E-04	1.82E-04	1.25E+00	5.86E+00	35
		ANNUAL	1ST HIGH	4.12E-04	1.82E-03	1.49E-03	5.22E-04	3.22E-05	8.22E-06	5.82E-02	3.20E-01	15
	SO_2	3- Hr	2ND HIGH	2.73E-03	8.45E-04	4.01E-03	4.21E-03	1.06E-04	9.96E-05	3.36E+00	1.14E+01	1,300
		24- Hr	2ND HIGH	7.59E-04	2.39E-04	3.89E-04	1.45E-03	3.88E-05	2.04E-05	1.16E+00	4.16E+00	260
		ANNUAL	1ST HIGH	2.58E-05	8.26E-06	1.69E-05	6.86E-05	1.79E-06	8.95E-07	3.73E-02	2.62E-01	60
Fort Peck IR Class I Area	NO_2	1-Hr	1ST HIGH	5.32E-02	2.62E-01	3.12E-01	3.41E-02	1.16E-03	1.05E-03	1.18E+00	7.85E+00	565
		ANNUAL	1ST HIGH	2.53E-04	1.27E-03	8.50E-04	5.12E-04	2.24E-05	2.31E-06	2.69E-02	7.75E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.81E-02	8.95E-02	8.57E-02	1.37E-02	1.34E-03	3.63E-04	8.99E-01	3.82E+00	150
		ANNUAL	1ST HIGH	1.33E-03	4.35E-03	3.32E-03	1.24E-03	1.43E-04	1.24E-05	1.23E-01	2.84E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.55E-02	6.69E-02	7.04E-02	1.15E-02	6.25E-04	2.80E-04	6.58E-01	3.30E+00	35
		ANNUAL	1ST HIGH	7.72E-04	3.34E-03	2.61E-03	1.03E-03	5.80E-05	9.09E-06	7.95E-02	2.07E-01	15
	SO_2	1-Hr	1ST HIGH	6.89E-03	2.05E-03	6.91E-03	7.98E-03	1.39E-04	2.11E-04	3.65E+00	2.41E+01	1,300
		3- Hr	2ND HIGH	3.60E-03	1.07E-03	4.33E-03	5.37E-03	1.10E-04	1.61E-04	2.14E+00	1.83E+01	1,300
		24- Hr	2ND HIGH	1.31E-03	3.98E-04	9.38E-04	2.37E-03	4.50E-05	3.92E-05	6.34E-01	7.01E+00	260
		ANNUAL	1ST HIGH	7.61E-05	2.30E-05	4.70E-05	2.16E-04	5.16E-06	1.52E-06	7.94E-02	3.18E-01	60
Gates of the Mountain W Class I Area	NO_2	1-Hr	1ST HIGH	1.20E-03	6.13E-03	1.02E-02	9.22E-03	1.47E-04	6.11E-05	7.12E+00	7.12E+00	565
		ANNUAL	1ST HIGH	4.44E-06	2.24E-05	9.29E-06	2.81E-05	5.42E-07	2.84E-08	7.10E-02	7.13E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.97E-03	3.23E-02	3.11E-02	1.48E-02	9.95E-04	1.10E-04	2.68E+00	2.92E+00	150
		ANNUAL	1ST HIGH	2.55E-04	8.84E-04	6.94E-04	4.11E-04	3.03E-05	3.01E-06	1.84E-01	2.24E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.35E-03	2.77E-02	2.75E-02	1.31E-02	5.07E-04	8.84E-05	1.95E+00	2.29E+00	35
		ANNUAL	1ST HIGH	1.68E-04	7.28E-04	5.85E-04	3.57E-04	1.46E-05	2.35E-06	1.19E-01	1.54E-01	15
	SO_2	1-Hr	1ST HIGH	8.23E-04	2.53E-04	9.11E-04	3.70E-03	5.61E-05	3.97E-05	4.28E+00	4.30E+00	1,300
		3- Hr	2ND HIGH	6.16E-04	1.97E-04	5.65E-04	3.03E-03	5.00E-05	1.92E-05	3.47E+00	3.47E+00	1,300
		24- Hr	2ND HIGH	2.97E-04	9.21E-05	2.52E-04	1.50E-03	2.56E-05	8.26E-06	1.65E+00	1.67E+00	260
		ANNUAL	1ST HIGH	1.14E-05	3.51E-06	6.96E-06	5.14E-05	8.64E-07	2.85E-07	1.19E-01	1.42E-01	60
Grand Teton NP Class I Area	NO_2	ANNUAL	1ST HIGH	4.05E-06	2.08E-05	1.58E-05	1.07E-05	5.19E-07	5.94E-08	1.13E-02	3.55E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.03E-02	3.65E-02	3.17E-02	5.40E-03	6.46E-04	1.42E-04	7.46E-01	4.05E+00	150
		ANNUAL	1ST HIGH	2.78E-04	9.97E-04	8.87E-04	2.21E-04	2.22E-05	4.33E-06	4.41E-02	2.95E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	7.01E-03	3.07E-02	2.71E-02	4.81E-03	3.32E-04	1.18E-04	6.64E-01	3.34E+00	35
		ANNUAL	1ST HIGH	1.92E-04	8.41E-04	7.62E-04	1.97E-04	1.14E-05	3.51E-06	3.96E-02	2.27E-01	15
	SO_2	3- Hr	2ND HIGH	9.77E-04	2.98E-04	8.61E-04	1.34E-03	3.30E-05	3.42E-05	2.12E+00	5.97E+00	1,300
		24- Hr	2ND HIGH	2.70E-04	8.43E-05	2.39E-04	4.74E-04	1.33E-05	1.18E-05	5.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	1.02E-05	3.20E-06	7.16E-06	2.28E-05	5.87E-07	3.53E-07	2.36E-02	2.92E-01	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
North Absaorka W Class I Area	NO_2	ANNUAL	1ST HIGH	1.19E-04	6.34E-04	2.24E-04	7.47E-04	3.98E-05	6.04E-07	2.17E-02	2.75E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.36E-02	1.22E-01	1.47E-01	3.99E-02	5.97E-03	4.25E-04	1.80E+00	6.59E+00	150
		ANNUAL	1ST HIGH	1.32E-03	4.67E-03	3.61E-03	2.11E-03	2.89E-04	1.61E-05	1.43E-01	3.51E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.26E-02	1.02E-01	1.25E-01	3.40E-02	2.44E-03	3.32E-04	1.48E+00	5.38E+00	35
		ANNUAL	1ST HIGH	8.43E-04	3.79E-03	3.03E-03	1.77E-03	1.23E-04	1.26E-05	1.18E-01	2.93E-01	15
	SO_2	3- Hr	2ND HIGH	2.88E-03	8.96E-04	3.38E-03	1.43E-02	3.97E-04	9.47E-05	5.23E+00	7.73E+00	1,300
		24- Hr	2ND HIGH	1.30E-03	4.08E-04	1.26E-03	5.08E-03	1.52E-04	3.82E-05	1.86E+00	3.47E+00	260
		ANNUAL	1ST HIGH	6.29E-05	2.11E-05	3.62E-05	3.50E-04	9.15E-06	1.50E-06	1.09E-01	2.31E-01	60
North Cheyenne IR Class I Area*	NO_2	1-Hr	1ST HIGH	1.22E+01	5.96E+01	4.28E+02	5.08E-01	6.80E-02	2.68E+00	4.28E+02	4.28E+02	565
		ANNUAL	1ST HIGH	6.27E-02	3.10E-01	1.63E+00	3.58E-03	2.11E-04	1.71E-02	1.92E+00	2.00E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	4.29E-01	9.88E-01	3.92E+00	2.24E-02	7.74E-03	6.24E-02	4.57E+00	8.34E+00	150
		ANNUAL	1ST HIGH	5.28E-02	1.27E-01	4.76E-01	3.25E-03	6.23E-04	6.41E-03	8.79E-01	1.30E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.23E-01	4.43E-01	1.72E+00	1.73E-02	1.74E-03	1.69E-02	3.09E+00	5.92E+00	35
		ANNUAL	1ST HIGH	1.66E-02	6.16E-02	1.98E-01	2.44E-03	1.93E-04	1.83E-03	4.16E-01	6.92E-01	15
	SO_2	1-Hr	1ST HIGH	1.17E+00	3.47E-01	6.55E+00	8.80E-02	8.00E-03	4.63E-01	3.07E+01	3.07E+01	1,300
		3- Hr	2ND HIGH	3.83E-01	1.14E-01	1.67E+00	3.98E-02	3.62E-03	2.17E-01	8.55E+00	1.05E+01	1,300
		24- Hr	2ND HIGH	5.78E-02	1.72E-02	2.29E-01	6.13E-03	5.26E-04	2.81E-02	2.73E+00	4.70E+00	260
		ANNUAL	1ST HIGH	6.47E-03	1.96E-03	2.55E-02	8.64E-04	3.22E-05	3.00E-03	4.68E-01	7.22E-01	60
Red Rock Lakes Class I Area	NO_2	1-Hr	1ST HIGH	1.49E-03	7.29E-03	7.30E-04	2.34E-03	8.34E-05	2.07E-05	6.14E+00	6.14E+00	565
		ANNUAL	1ST HIGH	3.26E-06	1.66E-05	2.82E-06	7.09E-06	2.00E-07	2.36E-08	2.45E-02	3.00E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.20E-03	1.91E-02	1.70E-02	5.19E-03	5.76E-04	1.01E-04	6.32E-01	1.75E+00	150
		ANNUAL	1ST HIGH	1.71E-04	6.13E-04	5.01E-04	1.63E-04	1.29E-05	2.37E-06	5.46E-02	1.38E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.70E-03	1.64E-02	1.44E-02	4.69E-03	3.07E-04	7.93E-05	5.80E-01	1.52E+00	35
		ANNUAL	1ST HIGH	1.18E-04	5.16E-04	4.30E-04	1.45E-04	6.69E-06	1.92E-06	4.69E-02	1.12E-01	15
	SO_2	1-Hr	1ST HIGH	5.67E-04	1.75E-04	3.54E-04	1.62E-03	4.60E-05	2.60E-05	4.98E+00	4.98E+00	1,300
		3- Hr	2ND HIGH	4.91E-04	1.50E-04	3.00E-04	1.19E-03	3.68E-05	1.67E-05	2.56E+00	3.23E+00	1,300
		24- Hr	2ND HIGH	1.80E-04	5.81E-05	1.41E-04	3.82E-04	1.19E-05	6.48E-06	7.30E-01	1.10E+00	260
		ANNUAL	1ST HIGH	6.25E-06	1.94E-06	3.82E-06	1.63E-05	3.32E-07	1.84E-07	3.98E-02	9.60E-02	60
Scapegoat W Class I Area	NO_2	1-Hr	1ST HIGH	1.03E-03	5.30E-03	8.44E-03	2.77E-03	8.00E-05	5.71E-05	3.19E+00	3.19E+00	565
		ANNUAL	1ST HIGH	1.62E-06	8.17E-06	5.66E-06	8.13E-06	1.73E-07	1.84E-08	2.32E-02	2.34E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.52E-03	1.99E-02	2.08E-02	6.16E-03	4.44E-04	7.28E-05	2.78E+00	2.82E+00	150
		ANNUAL	1ST HIGH	1.61E-04	5.54E-04	4.75E-04	2.43E-04	1.83E-05	2.12E-06	1.17E-01	1.46E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.92E-03	1.70E-02	1.84E-02	5.50E-03	2.29E-04	5.62E-05	1.91E+00	1.91E+00	35
		ANNUAL	1ST HIGH	1.06E-04	4.55E-04	3.98E-04	2.12E-04	8.81E-06	1.62E-06	7.89E-02	1.04E-01	15
	SO_2	1-Hr	1ST HIGH	6.35E-04	2.06E-04	7.65E-04	1.71E-03	3.42E-05	4.44E-05	3.48E+00	4.74E+00	1,300
		3- Hr	2ND HIGH	4.92E-04	1.50E-04	5.00E-04	1.38E-03	2.62E-05	1.92E-05	2.69E+00	2.72E+00	1,300
		24- Hr	2ND HIGH	2.47E-04	7.57E-05	1.86E-04	7.20E-04	1.22E-05	9.12E-06	1.30E+00	1.43E+00	260
		ANNUAL	1ST HIGH	7.23E-06	2.23E-06	4.89E-06	2.93E-05	5.16E-07	2.15E-07	6.57E-02	8.27E-02	60
Teton W Class I Area	NO_2	ANNUAL	1ST HIGH	2.27E-05	1.20E-04	4.14E-05	1.05E-04	5.78E-06	1.69E-07	7.69E-03	2.23E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	7.06E-02	6.45E-02	2.25E-02	2.82E-03	3.10E-04	1.51E+00	4.68E+00	150
		ANNUAL	1ST HIGH	6.09E-04	2.17E-03	1.73E-03	7.28E-04	8.46E-05	9.00E-06	7.76E-02	2.78E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	6.00E-02	5.33E-02	1.95E-02	1.33E-03	2.52E-04	1.26E+00	3.96E+00	35
		ANNUAL	1ST HIGH	4.05E-04	1.80E-03	1.46E-03	6.34E-04	4.04E-05	7.18E-06	6.67E-02	2.33E-01	15
	SO_2	3- Hr	2ND HIGH	1.43E-03	4.50E-04	1.71E-03	9.01E-03	2.27E-04	5.11E-05	2.91E+00	5.92E+00	1,300
		24- Hr	2ND HIGH	6.61E-04	2.20E-04	6.03E-04	2.75E-03	7.61E-05	1.84E-05	1.07E+00	2.55E+00	260
		ANNUAL	1ST HIGH	2.48E-05	8.09E-06	1.55E-05	9.08E-05	2.36E-06	7.49E-07	4.53E-02	1.98E-01	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Theodore Roosevelt NP Class I Area	NO_2	ANNUAL	1ST HIGH	3.96E-04	1.98E-03	1.83E-03	2.99E-04	2.04E-05	4.47E-06	2.90E-02	5.99E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.71E-02	9.90E-02	1.16E-01	2.05E-02	1.79E-03	3.76E-04	1.62E+00	5.65E+00	150
		ANNUAL	1ST HIGH	1.90E-03	6.27E-03	5.89E-03	9.78E-04	1.34E-04	2.26E-05	1.34E-01	4.47E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.85E-02	8.33E-02	9.17E-02	1.84E-02	9.35E-04	2.95E-04	1.27E+00	4.74E+00	35
		ANNUAL	1ST HIGH	1.12E-03	4.87E-03	4.69E-03	8.27E-04	5.58E-05	1.67E-05	9.50E-02	3.34E-01	15
	SO_2	3- Hr	2ND HIGH	2.51E-03	7.50E-04	2.39E-03	2.74E-03	1.25E-04	1.26E-04	2.14E+00	3.66E+01	1,300
		24- Hr	2ND HIGH	1.04E-03	3.15E-04	1.26E-03	1.44E-03	4.77E-05	4.46E-05	1.05E+00	1.09E+01	260
		ANNUAL	1ST HIGH	1.13E-04	3.42E-05	8.50E-05	1.61E-04	5.16E-06	2.81E-06	1.07E-01	8.20E-01	60
UL Bend W Class I Area	NO_2	1-Hr	1ST HIGH	2.42E-02	1.19E-01	1.59E-01	1.08E-01	5.54E-03	3.21E-04	2.30E+00	2.30E+00	565
		ANNUAL	1ST HIGH	1.73E-04	8.59E-04	3.92E-04	1.54E-03	7.16E-05	7.48E-07	5.74E-02	6.22E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.09E-02	7.31E-02	6.82E-02	2.38E-02	2.77E-03	2.03E-04	1.31E+00	2.55E+00	150
		ANNUAL	1ST HIGH	1.10E-03	3.46E-03	2.55E-03	2.01E-03	2.86E-04	9.13E-06	1.86E-01	2.87E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.35E-02	5.98E-02	5.70E-02	1.98E-02	1.24E-03	1.54E-04	1.14E+00	2.35E+00	35
		ANNUAL	1ST HIGH	6.09E-04	2.58E-03	1.96E-03	1.57E-03	1.01E-04	6.36E-06	1.18E-01	1.98E-01	15
	SO_2	1-Hr	1ST HIGH	4.23E-03	1.28E-03	5.60E-03	2.15E-02	5.59E-04	1.42E-04	3.68E+00	1.01E+01	1,300
		3- Hr	2ND HIGH	3.39E-03	1.01E-03	3.43E-03	1.34E-02	2.89E-04	1.17E-04	2.44E+00	5.60E+00	1,300
		24- Hr	2ND HIGH	1.19E-03	3.56E-04	8.88E-04	4.56E-03	1.20E-04	3.12E-05	9.17E-01	2.08E+00	260
		ANNUAL	1ST HIGH	6.99E-05	2.11E-05	4.07E-05	4.74E-04	1.17E-05	1.23E-06	1.35E-01	2.08E-01	60
Washakie W Class I Area	NO_2	ANNUAL	1ST HIGH	9.28E-05	4.99E-04	1.15E-04	5.68E-04	3.18E-05	6.23E-07	1.53E-02	2.47E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.18E-02	1.15E-01	1.05E-01	3.69E-02	4.93E-03	4.76E-04	2.16E+00	6.86E+00	150
		ANNUAL	1ST HIGH	1.12E-03	3.98E-03	2.81E-03	1.87E-03	2.53E-04	1.89E-05	1.27E-01	4.18E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.07E-02	9.46E-02	8.86E-02	3.14E-02	2.18E-03	3.85E-04	1.89E+00	5.75E+00	35
		ANNUAL	1ST HIGH	7.19E-04	3.24E-03	2.37E-03	1.57E-03	1.10E-04	1.49E-05	1.06E-01	3.51E-01	15
	SO_2	3- Hr	2ND HIGH	3.23E-03	1.07E-03	2.73E-03	1.95E-02	5.20E-04	1.32E-04	6.75E+00	9.41E+00	1,300
		24- Hr	2ND HIGH	1.17E-03	3.80E-04	9.85E-04	5.42E-03	1.48E-04	3.70E-05	2.19E+00	3.88E+00	260
		ANNUAL	1ST HIGH	5.18E-05	1.77E-05	2.69E-05	2.93E-04	7.80E-06	1.71E-06	9.57E-02	2.77E-01	60
Wind Cave NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.48E-04	1.23E-03	1.17E-03	1.12E-04	7.64E-06	3.13E-06	8.30E-03	1.80E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.00E-02	7.19E-02	6.56E-02	7.64E-03	9.60E-04	3.52E-04	8.01E-01	7.02E+00	150
		ANNUAL	1ST HIGH	1.99E-03	6.84E-03	6.25E-03	7.68E-04	1.03E-04	2.62E-05	1.07E-01	8.67E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	6.06E-02	5.66E-02	6.70E-03	4.81E-04	2.91E-04	6.41E-01	5.60E+00	35
		ANNUAL	1ST HIGH	1.26E-03	5.55E-03	5.17E-03	6.68E-04	4.80E-05	2.02E-05	8.74E-02	5.92E-01	15
	SO_2	3- Hr	2ND HIGH	2.33E-03	7.03E-04	1.72E-03	1.77E-03	9.12E-05	7.04E-05	8.66E-01	8.95E+00	1,300
		24- Hr	2ND HIGH	8.68E-04	2.63E-04	5.67E-04	7.60E-04	3.09E-05	2.51E-05	3.77E-01	3.34E+00	260
		ANNUAL	1ST HIGH	1.08E-04	3.30E-05	8.13E-05	1.08E-04	3.90E-06	2.91E-06	5.90E-02	6.51E-01	60
Yellowstone NP Class I Area	NO_2	ANNUAL	1ST HIGH	1.84E-05	9.66E-05	5.62E-05	6.11E-05	2.96E-06	1.91E-07	3.11E-02	3.34E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.37E-02	8.60E-02	1.06E-01	1.33E-02	1.76E-03	4.22E-04	1.50E+00	4.54E+00	150
		ANNUAL	1ST HIGH	6.53E-04	2.34E-03	2.18E-03	6.26E-04	6.31E-05	9.93E-06	1.04E-01	2.58E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.60E-02	7.21E-02	8.99E-02	1.16E-02	8.63E-04	3.29E-04	1.21E+00	3.86E+00	35
		ANNUAL	1ST HIGH	4.40E-04	1.95E-03	1.86E-03	5.50E-04	3.08E-05	7.94E-06	8.93E-02	2.19E-01	15
	SO_2	3- Hr	2ND HIGH	2.62E-03	8.04E-04	2.66E-03	4.65E-03	1.11E-04	7.43E-05	1.68E+00	3.92E+00	1,300
		24- Hr	2ND HIGH	8.64E-04	2.69E-04	8.55E-04	1.91E-03	4.48E-05	3.55E-05	8.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	2.57E-05	8.10E-06	1.95E-05	7.04E-05	1.70E-06	8.23E-07	5.67E-02	1.68E-01	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Absaorka Beartooth W Class II Area	NO_2	1-Hr	1ST HIGH	7.70E-02	3.77E-01	2.26E-01	4.93E+00	3.73E-03	5.33E-04	7.48E+00	7.48E+00	565
		ANNUAL	1ST HIGH	3.64E-04	1.86E-03	5.10E-04	1.34E-02	2.35E-05	1.41E-06	1.01E-01	1.03E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.85E-02	1.39E-01	1.85E-01	7.28E-02	6.32E-03	9.25E-04	3.10E+00	5.72E+00	150
		ANNUAL	1ST HIGH	1.97E-03	6.69E-03	5.28E-03	5.18E-03	2.29E-04	2.46E-05	2.47E-01	3.78E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.57E-02	1.16E-01	1.55E-01	4.50E-02	3.05E-03	7.20E-04	2.47E+00	5.22E+00	35
		ANNUAL	1ST HIGH	1.19E-03	5.27E-03	4.38E-03	3.13E-03	9.85E-05	1.86E-05	1.70E-01	3.11E-01	15
	SO_2	1-Hr	1ST HIGH	1.04E-02	3.21E-03	1.16E-02	8.31E-01	4.89E-04	3.92E-04	8.99E+00	9.39E+00	1,300
		3- Hr	2ND HIGH	7.39E-03	2.36E-03	8.18E-03	2.91E-01	3.56E-04	2.62E-04	6.44E+00	7.81E+00	1,300
		24- Hr	2ND HIGH	1.86E-03	5.57E-04	1.62E-03	3.90E-02	1.49E-04	8.27E-05	2.53E+00	3.41E+00	260
		ANNUAL	1ST HIGH	1.09E-04	3.44E-05	5.88E-05	2.64E-03	7.63E-06	2.59E-06	1.85E-01	2.80E-01	60
Agate Fossil Beds NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.12E-04	5.59E-04	5.40E-04	4.80E-05	2.54E-06	2.22E-06	4.84E-03	2.39E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.26E-02	4.52E-02	4.10E-02	5.58E-03	6.16E-04	3.32E-04	5.74E-01	8.23E+00	150
		ANNUAL	1ST HIGH	1.15E-03	3.89E-03	3.78E-03	4.77E-04	5.67E-05	2.09E-05	7.71E-02	8.07E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.72E-03	3.82E-02	3.60E-02	4.92E-03	3.40E-04	2.67E-04	4.90E-01	6.65E+00	35
		ANNUAL	1ST HIGH	7.15E-04	3.10E-03	3.08E-03	4.13E-04	2.68E-05	1.60E-05	6.35E-02	5.55E-01	15
	SO_2	3- Hr	2ND HIGH	1.59E-03	4.77E-04	1.47E-03	1.49E-03	5.42E-05	7.12E-05	9.20E-01	8.05E+00	1,300
		24- Hr	2ND HIGH	5.36E-04	1.60E-04	4.28E-04	4.84E-04	2.02E-05	2.47E-05	3.67E-01	3.20E+00	260
		ANNUAL	1ST HIGH	6.81E-05	2.09E-05	5.44E-05	6.84E-05	2.04E-06	2.42E-06	4.63E-02	7.22E-01	60
Big Horn Canyon NRA Class II Area	NO_2	1-Hr	1ST HIGH	1.67E-01	8.11E-01	1.68E+00	8.08E-02	6.03E-03	1.94E+00	5.60E+01	6.50E+01	565
		ANNUAL	1ST HIGH	2.42E-03	1.22E-02	2.11E-02	2.00E-03	8.76E-05	4.74E-03	4.80E-01	5.24E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	9.97E-02	3.26E-01	4.51E-01	1.88E-02	2.51E-03	6.54E-02	1.59E+01	1.61E+01	150
		ANNUAL	1ST HIGH	6.72E-03	2.12E-02	3.05E-02	2.61E-03	3.58E-04	2.98E-03	1.32E+00	1.68E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	5.76E-02	2.57E-01	3.53E-01	1.53E-02	1.06E-03	2.91E-02	2.88E+00	5.38E+00	35
		ANNUAL	1ST HIGH	3.60E-03	1.56E-02	2.26E-02	2.05E-03	1.31E-04	1.42E-03	2.74E-01	5.10E-01	15
	SO_2	1-Hr	1ST HIGH	2.61E-02	8.28E-03	3.23E-02	1.81E-02	6.40E-04	3.14E-01	2.33E+01	2.69E+01	1,300
		3- Hr	2ND HIGH	1.43E-02	4.52E-03	2.67E-02	1.15E-02	4.59E-04	1.14E-01	1.24E+01	1.31E+01	1,300
		24- Hr	2ND HIGH	6.05E-03	1.89E-03	8.72E-03	3.51E-03	9.98E-05	1.70E-02	2.96E+00	4.79E+00	260
		ANNUAL	1ST HIGH	4.57E-04	1.46E-04	5.76E-04	6.26E-04	1.47E-05	8.40E-04	4.43E-01	6.11E-01	60
Black Elk W Class II Area	NO_2	ANNUAL	1ST HIGH	2.25E-04	1.13E-03	9.70E-04	1.13E-04	7.71E-06	2.30E-06	8.05E-03	1.78E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.02E-02	7.28E-02	6.12E-02	7.54E-03	1.03E-03	3.60E-04	7.98E-01	6.75E+00	150
		ANNUAL	1ST HIGH	1.88E-03	6.44E-03	5.77E-03	7.37E-04	9.84E-05	2.42E-05	1.05E-01	8.22E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.38E-02	6.13E-02	5.29E-02	6.63E-03	4.96E-04	2.99E-04	6.66E-01	5.31E+00	35
		ANNUAL	1ST HIGH	1.19E-03	5.21E-03	4.78E-03	6.40E-04	4.56E-05	1.88E-05	8.60E-02	5.31E-01	15
	SO_2	3- Hr	2ND HIGH	1.79E-03	5.42E-04	1.58E-03	1.60E-03	8.50E-05	6.62E-05	9.42E-01	6.85E+00	1,300
		24- Hr	2ND HIGH	8.03E-04	2.40E-04	5.55E-04	7.18E-04	3.23E-05	2.69E-05	3.07E-01	2.80E+00	260
		ANNUAL	1ST HIGH	1.04E-04	3.17E-05	7.46E-05	1.05E-04	3.80E-06	2.65E-06	5.79E-02	5.44E-01	60
Cloud Peak Class II Area	NO_2	ANNUAL	1ST HIGH	1.09E-03	5.35E-03	6.77E-03	2.97E-04	7.50E-06	3.53E-05	3.03E-02	6.23E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.53E-01	5.45E-01	6.57E-01	2.07E-02	2.10E-03	1.23E-03	2.19E+00	6.26E+00	150
		ANNUAL	1ST HIGH	4.73E-03	1.57E-02	1.94E-02	1.14E-03	1.12E-04	1.02E-04	1.84E-01	5.55E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.04E-01	4.58E-01	5.59E-01	1.84E-02	1.03E-03	9.57E-04	1.82E+00	4.89E+00	35
		ANNUAL	1ST HIGH	2.86E-03	1.24E-02	1.56E-02	9.70E-04	5.17E-05	7.25E-05	1.40E-01	4.19E-01	15
	SO_2	3- Hr	2ND HIGH	2.01E-02	6.08E-03	1.35E-02	8.99E-03	1.45E-04	3.61E-04	1.82E+00	5.04E+00	1,300
		24- Hr	2ND HIGH	6.29E-03	1.92E-03	5.60E-03	2.07E-03	5.68E-05	1.01E-04	5.97E-01	2.54E+00	260
		ANNUAL	1ST HIGH	2.47E-04	7.66E-05	2.49E-04	1.72E-04	3.64E-06	1.50E-05	9.77E-02	2.71E-01	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Crow IR Class II Area*	NO_2	1-Hr	1ST HIGH	4.38E+01	2.25E+02	3.22E+02	7.88E+01	1.46E+00	1.15E+01	**1.59E+03**	**1.59E+03**	565
		ANNUAL	1ST HIGH	1.10E-01	5.64E-01	1.64E+00	1.12E-01	2.34E-03	4.64E-02	7.09E+00	7.13E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	9.78E-01	2.33E+00	4.59E+00	4.59E-01	6.05E-02	2.39E-01	**2.04E+02**	**2.05E+02**	150
		ANNUAL	1ST HIGH	8.58E-02	2.07E-01	4.93E-01	2.50E-02	3.60E-03	1.83E-02	1.51E+01	1.54E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.63E-01	9.65E-01	1.80E+00	1.70E-01	1.22E-02	9.30E-02	4.18E+00	7.56E+00	35
		ANNUAL	1ST HIGH	2.48E-02	9.63E-02	2.11E-01	1.09E-02	8.10E-04	6.15E-03	4.42E-01	7.98E-01	15
	SO_2	1-Hr	1ST HIGH	4.21E+00	1.25E+00	4.93E+00	1.27E+01	5.06E-02	1.88E+00	2.54E+02	2.54E+02	1,300
		3- Hr	2ND HIGH	9.95E-01	2.95E-01	1.50E+00	2.14E+00	1.80E-02	4.11E-01	1.06E+02	1.06E+02	1,300
		24- Hr	2ND HIGH	1.31E-01	3.90E-02	2.74E-01	3.96E-01	2.56E-03	8.78E-02	1.59E+01	1.65E+01	260
		ANNUAL	1ST HIGH	1.11E-02	4.55E-03	2.57E-02	1.91E-02	1.49E-04	7.45E-03	2.45E+00	2.62E+00	60
Devils Tower NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.93E-03	9.62E-03	6.35E-03	9.27E-04	7.15E-05	1.49E-05	3.65E-02	5.14E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.79E-02	1.19E-01	1.22E-01	8.43E-03	1.95E-03	4.83E-04	9.45E-01	5.35E+00	150
		ANNUAL	1ST HIGH	4.69E-03	1.47E-02	1.17E-02	1.37E-03	2.65E-04	4.58E-05	1.54E-01	1.16E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.98E-02	8.62E-02	1.05E-01	7.37E-03	7.21E-04	3.95E-04	8.23E-01	4.24E+00	35
		ANNUAL	1ST HIGH	2.51E-03	1.08E-02	9.05E-03	1.10E-03	9.53E-05	3.32E-05	1.17E-01	5.63E-01	15
	SO_2	3- Hr	2ND HIGH	5.88E-03	1.75E-03	3.78E-03	4.61E-03	3.62E-04	2.66E-04	1.59E+00	1.53E+01	1,300
		24- Hr	2ND HIGH	2.49E-03	7.46E-04	1.42E-03	1.38E-03	1.05E-04	6.70E-05	6.24E-01	5.61E+00	260
		ANNUAL	1ST HIGH	3.55E-04	1.07E-04	2.12E-04	3.09E-04	1.40E-05	6.52E-06	9.96E-02	9.70E-01	60
Fort Belknap IR Class II Area	NO_2	1-Hr	1ST HIGH	1.42E-02	7.40E-02	1.28E-01	4.13E-02	2.36E-03	1.44E-04	3.46E+00	3.46E+00	565
		ANNUAL	1ST HIGH	7.12E-05	3.58E-04	1.70E-04	4.89E-04	2.35E-05	2.64E-07	8.46E-02	8.64E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.91E-02	6.75E-02	8.00E-02	1.71E-02	1.74E-03	2.97E-04	1.24E+00	2.36E+00	150
		ANNUAL	1ST HIGH	7.21E-04	2.29E-03	1.80E-03	1.12E-03	1.49E-04	6.57E-06	1.85E-01	2.57E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.26E-02	5.60E-02	6.66E-02	1.45E-02	7.09E-04	2.45E-04	1.05E+00	2.18E+00	35
		ANNUAL	1ST HIGH	4.10E-04	1.73E-03	1.39E-03	8.98E-04	5.69E-05	4.76E-06	1.11E-01	1.73E-01	15
	SO_2	1-Hr	1ST HIGH	4.01E-03	1.20E-03	3.92E-03	9.13E-03	2.80E-04	1.52E-04	3.09E+00	7.62E+00	1,300
		3- Hr	2ND HIGH	2.81E-03	8.50E-04	2.45E-03	6.76E-03	2.04E-04	7.61E-05	2.11E+00	5.53E+00	1,300
		24- Hr	2ND HIGH	1.11E-03	3.29E-04	7.63E-04	2.47E-03	6.89E-05	2.36E-05	6.99E-01	1.81E+00	260
		ANNUAL	1ST HIGH	4.36E-05	1.32E-05	2.78E-05	2.18E-04	5.58E-06	8.54E-07	1.47E-01	1.92E-01	60
Fort Laramie NHS Class II Area	NO_2	ANNUAL	1ST HIGH	8.12E-05	4.08E-04	4.22E-04	3.54E-05	1.85E-06	1.87E-06	3.30E-03	3.58E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.33E-02	4.91E-02	4.23E-02	5.58E-03	7.07E-04	1.94E-04	5.65E-01	7.43E+00	150
		ANNUAL	1ST HIGH	1.03E-03	3.49E-03	3.24E-03	4.35E-04	5.28E-05	1.87E-05	6.95E-02	9.50E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.25E-03	4.17E-02	3.58E-02	4.88E-03	3.46E-04	1.50E-04	4.81E-01	5.57E+00	35
		ANNUAL	1ST HIGH	6.46E-04	2.80E-03	2.65E-03	3.79E-04	2.54E-05	1.44E-05	5.77E-02	6.16E-01	15
	SO_2	3- Hr	2ND HIGH	1.90E-03	5.79E-04	1.52E-03	1.63E-03	6.85E-05	1.11E-04	9.23E-01	1.66E+01	1,300
		24- Hr	2ND HIGH	5.69E-04	1.72E-04	4.19E-04	6.00E-04	2.05E-05	2.31E-05	3.51E-01	4.23E+00	260
		ANNUAL	1ST HIGH	5.76E-05	1.77E-05	4.47E-05	5.92E-05	1.81E-06	2.12E-06	3.86E-02	9.21E-01	60
Jedediah Smith W Class II Area	NO_2	ANNUAL	1ST HIGH	2.67E-06	1.37E-05	9.35E-06	7.86E-06	3.67E-07	4.16E-08	1.17E-02	4.33E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.55E-03	3.11E-02	2.96E-02	3.62E-03	4.54E-04	1.33E-04	6.96E-01	3.56E+00	150
		ANNUAL	1ST HIGH	2.21E-04	7.93E-04	6.97E-04	1.72E-04	1.63E-05	3.32E-06	4.57E-02	3.18E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.15E-03	2.67E-02	2.52E-02	3.28E-03	2.45E-04	1.10E-04	5.98E-01	3.03E+00	35
		ANNUAL	1ST HIGH	1.53E-04	6.70E-04	5.99E-04	1.53E-04	8.45E-06	2.70E-06	4.09E-02	2.39E-01	15
	SO_2	3- Hr	2ND HIGH	8.76E-04	2.66E-04	6.46E-04	1.01E-03	2.44E-05	2.92E-05	2.31E+00	6.67E+00	1,300
		24- Hr	2ND HIGH	2.22E-04	6.99E-05	2.22E-04	3.83E-04	1.14E-05	1.07E-05	5.48E-01	2.08E+00	260
		ANNUAL	1ST HIGH	7.85E-06	2.45E-06	5.33E-06	1.74E-05	4.27E-07	2.73E-07	2.45E-02	3.53E-01	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Jewel Cave NM Class II Area	NO_2	ANNUAL	1ST HIGH	3.01E-04	1.50E-03	1.45E-03	1.06E-04	6.25E-06	3.79E-06	9.74E-03	2.06E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.27E-02	7.80E-02	7.11E-02	7.93E-03	9.39E-04	3.33E-04	7.70E-01	6.72E+00	150
		ANNUAL	1ST HIGH	2.00E-03	6.82E-03	6.38E-03	7.21E-04	9.04E-05	2.70E-05	1.08E-01	8.95E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.52E-02	6.74E-02	6.25E-02	7.23E-03	4.98E-04	2.75E-04	6.47E-01	5.22E+00	35
		ANNUAL	1ST HIGH	1.26E-03	5.49E-03	5.26E-03	6.27E-04	4.22E-05	2.08E-05	8.86E-02	5.78E-01	15
	SO_2	3- Hr	2ND HIGH	2.41E-03	7.27E-04	1.59E-03	1.52E-03	8.31E-05	6.52E-05	7.08E-01	7.28E+00	1,300
		24- Hr	2ND HIGH	9.13E-04	2.77E-04	5.85E-04	7.00E-04	3.38E-05	2.71E-05	4.20E-01	2.77E+00	260
		ANNUAL	1ST HIGH	1.13E-04	3.44E-05	8.57E-05	9.99E-05	3.35E-06	3.01E-06	6.09E-02	7.43E-01	60
Lee Metcalf W Class II Area	NO_2	1-Hr	1ST HIGH	2.27E-03	1.11E-02	5.97E-03	6.62E-03	2.40E-04	4.77E-05	1.16E+01	1.16E+01	565
		ANNUAL	1ST HIGH	1.54E-05	7.75E-05	1.11E-05	3.68E-05	8.38E-07	4.40E-08	1.50E-01	1.51E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.28E-02	4.55E-02	4.94E-02	1.38E-02	8.85E-04	2.83E-04	2.58E+00	3.44E+00	150
		ANNUAL	1ST HIGH	3.98E-04	1.41E-03	1.03E-03	4.87E-04	3.39E-05	4.83E-06	2.06E-01	2.62E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.41E-03	3.77E-02	4.15E-02	1.23E-02	4.58E-04	2.35E-04	2.22E+00	2.88E+00	35
		ANNUAL	1ST HIGH	2.66E-04	1.17E-03	8.80E-04	4.29E-04	1.71E-05	3.86E-06	1.61E-01	2.09E-01	15
	SO_2	1-Hr	1ST HIGH	1.58E-03	4.82E-04	1.01E-03	4.61E-03	6.68E-05	8.38E-05	8.73E+00	8.74E+00	1,300
		3- Hr	2ND HIGH	1.43E-03	4.38E-04	9.22E-04	2.79E-03	5.64E-05	7.40E-05	4.97E+00	4.97E+00	1,300
		24- Hr	2ND HIGH	4.73E-04	1.47E-04	3.82E-04	1.11E-03	2.43E-05	1.58E-05	1.53E+00	1.69E+00	260
		ANNUAL	1ST HIGH	1.70E-05	5.23E-06	8.85E-06	5.62E-05	9.34E-07	3.96E-07	1.77E-01	2.09E-01	60
Mt Naomi W Class II Area	NO_2	ANNUAL	1ST HIGH	3.57E-06	1.79E-05	2.11E-05	1.25E-06	6.47E-08	1.99E-08	5.32E-04	1.20E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.42E-03	1.14E-02	8.61E-03	1.73E-03	1.77E-04	5.13E-05	2.14E-01	5.23E+00	150
		ANNUAL	1ST HIGH	8.34E-05	2.89E-04	2.72E-04	4.02E-05	4.69E-06	9.85E-07	8.51E-03	2.23E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.13E-03	9.03E-03	7.05E-03	1.55E-03	9.42E-05	3.62E-05	1.80E-01	3.65E+00	35
		ANNUAL	1ST HIGH	5.50E-05	2.38E-04	2.27E-04	3.54E-05	2.39E-06	7.68E-07	7.50E-03	1.57E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	4.68E-04	1.36E-03	1.02E-03	1.96E-05	2.37E-05	5.26E-01	2.02E+01	1,300
		24- Hr	2ND HIGH	1.44E-04	4.36E-05	1.41E-04	2.08E-04	6.09E-06	7.37E-06	1.21E-01	6.02E+00	260
		ANNUAL	1ST HIGH	4.14E-06	1.27E-06	3.19E-06	4.79E-06	1.37E-07	1.02E-07	3.77E-03	3.75E-01	60
Mt Rushmore Class II Area	NO_2	ANNUAL	1ST HIGH	2.28E-04	1.14E-03	9.52E-04	1.16E-04	7.90E-06	2.31E-06	7.97E-03	2.01E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	7.00E-02	6.07E-02	7.60E-03	1.02E-03	3.47E-04	7.71E-01	6.89E+00	150
		ANNUAL	1ST HIGH	1.87E-03	6.43E-03	5.76E-03	7.38E-04	9.88E-05	2.42E-05	1.05E-01	8.56E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.32E-02	5.90E-02	5.12E-02	6.68E-03	5.03E-04	2.88E-04	6.44E-01	5.34E+00	35
		ANNUAL	1ST HIGH	1.19E-03	5.20E-03	4.77E-03	6.40E-04	4.57E-05	1.88E-05	8.59E-02	5.24E-01	15
	SO_2	3- Hr	2ND HIGH	1.77E-03	5.37E-04	1.56E-03	1.59E-03	8.31E-05	6.78E-05	9.45E-01	6.89E+00	1,300
		24- Hr	2ND HIGH	8.05E-04	2.40E-04	5.59E-04	7.19E-04	3.13E-05	2.65E-05	3.05E-01	2.71E+00	260
		ANNUAL	1ST HIGH	1.05E-04	3.18E-05	7.47E-05	1.06E-04	3.83E-06	2.66E-06	5.78E-02	5.28E-01	60
Popo Agie W Class II Area	NO_2	ANNUAL	1ST HIGH	3.18E-05	1.61E-04	1.49E-04	4.03E-05	2.11E-06	5.54E-07	3.17E-03	9.45E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.73E-02	9.57E-02	6.61E-02	9.51E-03	9.76E-04	3.27E-04	1.29E+00	1.02E+01	150
		ANNUAL	1ST HIGH	7.20E-04	2.53E-03	2.07E-03	5.05E-04	5.67E-05	1.21E-05	6.40E-02	5.52E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.80E-02	7.89E-02	5.57E-02	8.68E-03	5.28E-04	2.67E-04	1.10E+00	8.37E+00	35
		ANNUAL	1ST HIGH	4.76E-04	2.09E-03	1.74E-03	4.43E-04	2.79E-05	9.57E-06	5.51E-02	4.39E-01	15
	SO_2	3- Hr	2ND HIGH	2.97E-03	9.15E-04	3.92E-03	2.73E-03	6.28E-05	9.77E-05	2.30E+00	1.42E+01	1,300
		24- Hr	2ND HIGH	9.11E-04	2.74E-04	7.25E-04	1.05E-03	2.53E-05	2.77E-05	8.84E-01	5.43E+00	260
		ANNUAL	1ST HIGH	3.29E-05	1.03E-05	2.21E-05	6.06E-05	1.60E-06	1.16E-06	3.36E-02	4.87E-01	60

Table C-4 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$, and SO_2 for Alternative H Revised -Scenario 2

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Soldier Creek WA Class II Area	NO_2	ANNUAL	1ST HIGH	1.71E-04	8.51E-04	8.57E-04	7.14E-05	3.89E-06	2.86E-06	6.72E-03	2.43E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.41E-02	5.06E-02	4.70E-02	5.67E-03	5.79E-04	2.91E-04	7.33E-01	7.90E+00	150
		ANNUAL	1ST HIGH	1.44E-03	4.88E-03	4.75E-03	5.65E-04	6.70E-05	2.36E-05	8.89E-02	8.89E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.72E-03	4.28E-02	4.15E-02	5.03E-03	3.31E-04	2.30E-04	6.09E-01	6.09E+00	35
		ANNUAL	1ST HIGH	8.98E-04	3.91E-03	3.89E-03	4.90E-04	3.16E-05	1.80E-05	7.28E-02	5.92E-01	15
	SO_2	3- Hr	2ND HIGH	1.49E-03	4.49E-04	1.51E-03	1.05E-03	5.49E-05	6.45E-05	9.98E-01	9.46E+00	1,300
		24- Hr	2ND HIGH	5.99E-04	1.83E-04	5.30E-04	4.97E-04	1.91E-05	2.50E-05	3.90E-01	3.41E+00	260
		ANNUAL	1ST HIGH	8.45E-05	2.59E-05	6.72E-05	8.10E-05	2.46E-06	2.74E-06	5.39E-02	7.34E-01	60
Wellsville Mountain W Class II Area	NO_2	ANNUAL	1ST HIGH	3.03E-06	1.52E-05	1.76E-05	9.32E-07	4.20E-08	1.38E-08	2.28E-04	1.12E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.22E-03	7.38E-03	6.62E-03	1.73E-03	1.49E-04	4.01E-05	2.02E-01	3.47E+00	150
		ANNUAL	1ST HIGH	6.40E-05	2.22E-04	2.15E-04	2.94E-05	3.28E-06	7.05E-07	5.80E-03	1.80E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.40E-03	5.93E-03	5.72E-03	1.55E-03	7.88E-05	2.79E-05	1.69E-01	2.08E+00	35
		ANNUAL	1ST HIGH	4.23E-05	1.83E-04	1.79E-04	2.58E-05	1.67E-06	5.49E-07	5.06E-03	1.05E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	4.72E-04	1.40E-03	9.36E-04	1.33E-05	1.63E-05	4.99E-01	6.11E+00	1,300
		24- Hr	2ND HIGH	1.01E-04	3.17E-05	1.13E-04	2.10E-04	4.75E-06	4.66E-06	1.10E-01	2.71E+00	260
		ANNUAL	1ST HIGH	3.25E-06	9.95E-07	2.60E-06	3.55E-06	9.55E-08	7.25E-08	2.46E-03	1.50E-01	60
Wind River IR Class II Area	NO_2	ANNUAL	1ST HIGH	1.17E-04	5.92E-04	5.59E-04	3.50E-04	1.84E-05	2.46E-06	1.16E-02	7.34E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.25E-02	1.21E-01	1.24E-01	2.55E-02	2.76E-03	6.04E-04	2.09E+00	1.18E+01	150
		ANNUAL	1ST HIGH	1.46E-03	5.09E-03	4.33E-03	1.50E-03	1.88E-04	3.41E-05	1.38E-01	9.40E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.30E-02	1.03E-01	1.03E-01	2.32E-02	1.43E-03	4.68E-04	1.81E+00	9.79E+00	35
		ANNUAL	1ST HIGH	9.46E-04	4.16E-03	3.61E-03	1.28E-03	8.54E-05	2.66E-05	1.17E-01	6.76E-01	15
	SO_2	3- Hr	2ND HIGH	4.18E-03	1.28E-03	5.54E-03	6.70E-03	1.87E-04	2.03E-04	4.15E+00	1.84E+02	1,300
		24- Hr	2ND HIGH	1.29E-03	3.92E-04	1.37E-03	3.04E-03	7.75E-05	6.37E-05	1.81E+00	3.47E+01	260
		ANNUAL	1ST HIGH	7.09E-05	2.22E-05	5.10E-05	2.29E-04	5.86E-06	3.57E-06	9.70E-02	4.99E+00	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Notes:
(1) Bold type indicate a modeled impact that is above the NAAQS/SAAQS
(2) Includes 75% NOx to NO2 conversion
* Area's modeled impacts have excluded receptors within 1-km of a MT CBNG or MTOG Alternative H source

Receptor Set	*Pollutant*	*Averaging Period*	*RANK*	*Modeled Concentration ($\mu g/m^3$)*								*NAAQS/SAAQS ($\mu g/m^3$)*
				MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
NEAR FIELD RECEPTORS												
Montana Near Field Receptors*	NO_2	1-Hr	1ST HIGH	3.31E+01	8.51E+01	5.39E+02	5.29E+01	2.30E+00	1.30E-01	5.39E+02	5.39E+02	565
		ANNUAL	1ST HIGH	2.41E-01	5.73E-01	1.58E+00	4.57E-01	1.34E-02	5.22E-04	1.74E+00	2.90E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	1.13E+00	1.31E+00	5.81E+00	6.67E-01	1.62E-01	4.80E-03	4.67E+01	4.68E+01	150
		ANNUAL	1ST HIGH	1.81E-01	2.04E-01	4.92E-01	9.27E-02	1.87E-02	3.74E-04	2.65E+00	2.86E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.68E-01	6.15E-01	2.16E+00	2.68E-01	3.24E-02	3.11E-03	3.01E+00	6.72E+00	35
		ANNUAL	1ST HIGH	5.23E-02	9.16E-02	2.21E-01	3.67E-02	3.89E-03	1.86E-04	3.99E-01	7.71E-01	15
	SO_2	1-Hr	1ST HIGH	3.18E+00	4.72E-01	8.22E+00	8.40E+00	2.31E-01	2.56E-02	1.40E+02	1.40E+02	1,300
		3- Hr	2ND HIGH	9.42E-01	1.40E-01	1.72E+00	3.36E+00	7.27E-02	1.05E-02	4.38E+01	4.39E+01	1,300
		24- Hr	2ND HIGH	1.63E-01	2.43E-02	3.39E-01	5.72E-01	1.12E-02	1.27E-03	1.51E+01	1.51E+01	260
		ANNUAL	1ST HIGH	2.41E-02	3.58E-03	2.48E-02	7.62E-02	7.03E-04	1.06E-04	1.63E+00	1.79E+00	60
Wyoming Near Field Receptors	NO_2	ANNUAL	1ST HIGH	4.84E-02	1.19E-01	2.52E-01	1.18E-02	7.39E-04	3.39E-04	3.78E-01	4.07E+01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.84E-01	3.80E-01	1.49E+00	4.41E-02	3.87E-02	5.47E-03	2.62E+00	1.06E+02	150
		ANNUAL	1ST HIGH	4.70E-02	5.93E-02	1.28E-01	5.45E-03	1.52E-03	3.84E-04	4.30E-01	1.91E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.28E-01	2.62E-01	1.07E+00	2.94E-02	1.14E-02	3.89E-03	1.98E+00	1.17E+01	35
		ANNUAL	1ST HIGH	1.70E-02	3.28E-02	7.51E-02	3.53E-03	3.86E-04	2.34E-04	2.47E-01	2.77E+00	15
	SO_2	3- Hr	2ND HIGH	1.46E-01	2.17E-02	1.32E-01	1.11E-01	5.78E-03	2.52E-03	6.71E+00	5.52E+02	1,300
		24- Hr	2ND HIGH	3.17E-02	4.71E-03	3.31E-02	1.82E-02	1.88E-03	6.46E-04	1.84E+00	1.24E+02	260
		ANNUAL	1ST HIGH	5.29E-03	7.89E-04	4.43E-03	2.32E-03	1.00E-04	7.98E-05	2.10E-01	1.72E+01	60
CLASS I AREAS												
Badlands NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.26E-04	5.64E-04	1.01E-03	1.48E-04	1.10E-05	2.84E-06	7.91E-03	1.30E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.34E-02	2.50E-02	5.25E-02	5.99E-03	9.94E-04	2.93E-04	7.44E-01	4.12E+00	150
		ANNUAL	1ST HIGH	1.66E-03	2.80E-03	5.02E-03	6.97E-04	1.04E-04	2.18E-05	9.07E-02	6.15E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.91E-03	2.19E-02	4.50E-02	5.29E-03	4.67E-04	2.43E-04	6.51E-01	3.47E+00	35
		ANNUAL	1ST HIGH	1.02E-03	2.23E-03	4.09E-03	5.96E-04	4.59E-05	1.66E-05	7.21E-02	4.28E-01	15
	SO_2	3- Hr	2ND HIGH	1.62E-03	2.53E-04	1.52E-03	1.75E-03	8.81E-05	6.13E-05	1.05E+00	8.51E+00	1,300
		24- Hr	2ND HIGH	5.35E-04	8.01E-05	4.54E-04	6.95E-04	3.98E-05	2.15E-05	3.30E-01	2.52E+00	260
		ANNUAL	1ST HIGH	9.56E-05	1.45E-05	6.98E-05	1.08E-04	4.14E-06	2.51E-06	5.55E-02	4.43E-01	60
Bob Marshall W Class I Area	NO_2	1-Hr	1ST HIGH	6.64E-04	1.69E-03	6.44E-03	1.48E-03	2.43E-05	4.87E-05	4.63E+00	4.63E+00	565
		ANNUAL	1ST HIGH	4.96E-07	1.26E-06	3.16E-06	2.33E-06	3.87E-08	1.23E-08	1.53E-02	1.53E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.10E-03	4.85E-03	1.25E-02	3.39E-03	3.21E-04	4.22E-05	1.43E+00	1.49E+00	150
		ANNUAL	1ST HIGH	8.62E-05	1.46E-04	2.78E-04	1.13E-04	9.30E-06	1.25E-06	6.28E-02	7.97E-02	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.90E-03	4.09E-03	1.00E-02	3.00E-03	1.20E-04	3.54E-05	8.52E-01	1.12E+00	35
		ANNUAL	1ST HIGH	5.58E-05	1.18E-04	2.30E-04	9.77E-05	4.36E-06	9.32E-07	4.17E-02	5.63E-02	15
	SO_2	1-Hr	1ST HIGH	7.53E-04	1.15E-04	7.35E-04	9.65E-04	3.72E-05	2.57E-05	4.20E+00	4.20E+00	1,300
		3- Hr	2ND HIGH	3.32E-04	5.11E-05	4.06E-04	8.56E-04	2.07E-05	1.58E-05	3.30E+00	3.30E+00	1,300
		24- Hr	2ND HIGH	1.70E-04	2.59E-05	1.52E-04	3.70E-04	8.17E-06	6.50E-06	6.19E-01	1.17E+00	260
		ANNUAL	1ST HIGH	3.97E-06	6.12E-07	3.10E-06	1.36E-05	2.60E-07	1.34E-07	3.85E-02	4.76E-02	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Bridger W Class I Area	NO_2	ANNUAL	1ST HIGH	2.33E-05	5.92E-05	1.14E-04	2.68E-05	1.42E-06	4.24E-07	3.24E-03	9.83E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.54E-02	4.40E-02	5.40E-02	1.14E-02	1.16E-03	2.92E-04	1.26E+00	7.18E+00	150
		ANNUAL	1ST HIGH	6.15E-04	1.08E-03	1.78E-03	4.15E-04	4.51E-05	1.01E-05	5.45E-02	5.19E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.67E-02	3.63E-02	4.58E-02	1.02E-02	6.35E-04	2.39E-04	1.05E+00	5.81E+00	35
		ANNUAL	1ST HIGH	4.09E-04	8.97E-04	1.50E-03	3.68E-04	2.26E-05	8.03E-06	4.73E-02	4.09E-01	15
	SO_2	3- Hr	2ND HIGH	3.07E-03	4.73E-04	4.26E-03	2.91E-03	7.36E-05	1.03E-04	1.96E+00	9.96E+00	1,300
		24- Hr	2ND HIGH	8.35E-04	1.26E-04	5.73E-04	1.03E-03	2.71E-05	2.58E-05	7.57E-01	4.39E+00	260
		ANNUAL	1ST HIGH	2.74E-05	4.29E-06	1.86E-05	4.73E-05	1.26E-06	9.72E-07	2.80E-02	4.37E-01	60
Fitzpatrick W Class I Area	NO_2	ANNUAL	1ST HIGH	2.17E-05	5.61E-05	9.16E-05	5.21E-05	2.77E-06	2.83E-07	3.49E-03	1.62E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.40E-02	4.27E-02	5.76E-02	1.49E-02	1.59E-03	2.21E-04	1.47E+00	6.79E+00	150
		ANNUAL	1ST HIGH	6.14E-04	1.09E-03	1.75E-03	5.91E-04	6.48E-05	1.03E-05	6.58E-02	3.87E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.61E-02	3.56E-02	4.92E-02	1.33E-02	8.01E-04	1.82E-04	1.22E+00	5.85E+00	35
		ANNUAL	1ST HIGH	4.12E-04	9.11E-04	1.49E-03	5.22E-04	3.22E-05	8.22E-06	5.74E-02	3.19E-01	15
	SO_2	3- Hr	2ND HIGH	2.73E-03	4.23E-04	4.01E-03	4.21E-03	1.06E-04	9.96E-05	3.36E+00	1.14E+01	1,300
		24- Hr	2ND HIGH	7.59E-04	1.19E-04	3.89E-04	1.45E-03	3.88E-05	2.04E-05	1.16E+00	4.16E+00	260
		ANNUAL	1ST HIGH	2.58E-05	4.13E-06	1.69E-05	6.86E-05	1.79E-06	8.95E-07	3.73E-02	2.62E-01	60
Fort Peck IR Class I Area	NO_2	1-Hr	1ST HIGH	5.32E-02	1.31E-01	3.12E-01	3.41E-02	1.16E-03	1.05E-03	1.12E+00	7.85E+00	565
		ANNUAL	1ST HIGH	2.53E-04	6.33E-04	8.50E-04	5.12E-04	2.24E-05	2.31E-06	2.63E-02	7.70E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.81E-02	4.48E-02	8.57E-02	1.37E-02	1.34E-03	3.63E-04	8.74E-01	3.81E+00	150
		ANNUAL	1ST HIGH	1.33E-03	2.18E-03	3.32E-03	1.24E-03	1.43E-04	1.24E-05	1.21E-01	2.82E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.55E-02	3.35E-02	7.04E-02	1.15E-02	6.25E-04	2.80E-04	6.55E-01	3.29E+00	35
		ANNUAL	1ST HIGH	7.72E-04	1.67E-03	2.61E-03	1.03E-03	5.80E-05	9.09E-06	7.79E-02	2.06E-01	15
	SO_2	1-Hr	1ST HIGH	6.89E-03	1.02E-03	6.91E-03	7.98E-03	1.39E-04	2.11E-04	3.65E+00	2.41E+01	1,300
		3- Hr	2ND HIGH	3.60E-03	5.36E-04	4.33E-03	5.37E-03	1.10E-04	1.61E-04	2.14E+00	1.83E+01	1,300
		24- Hr	2ND HIGH	1.31E-03	1.99E-04	9.38E-04	2.37E-03	4.50E-05	3.92E-05	6.33E-01	7.01E+00	260
		ANNUAL	1ST HIGH	7.61E-05	1.15E-05	4.70E-05	2.16E-04	5.16E-06	1.52E-06	7.94E-02	3.18E-01	60
Gates of the Mountain W Class I Area	NO_2	1-Hr	1ST HIGH	1.20E-03	3.07E-03	1.02E-02	9.22E-03	1.47E-04	6.11E-05	7.12E+00	7.12E+00	565
		ANNUAL	1ST HIGH	4.44E-06	1.12E-05	9.29E-06	2.81E-05	5.42E-07	2.84E-08	7.10E-02	7.13E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.97E-03	1.62E-02	3.11E-02	1.48E-02	9.95E-04	1.10E-04	2.68E+00	2.91E+00	150
		ANNUAL	1ST HIGH	2.55E-04	4.42E-04	6.94E-04	4.11E-04	3.03E-05	3.01E-06	1.83E-01	2.24E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.35E-03	1.38E-02	2.75E-02	1.31E-02	5.07E-04	8.84E-05	1.94E+00	2.29E+00	35
		ANNUAL	1ST HIGH	1.68E-04	3.64E-04	5.85E-04	3.57E-04	1.46E-05	2.35E-06	1.19E-01	1.54E-01	15
	SO_2	1-Hr	1ST HIGH	8.23E-04	1.27E-04	9.11E-04	3.70E-03	5.61E-05	3.97E-05	4.28E+00	4.30E+00	1,300
		3- Hr	2ND HIGH	6.16E-04	9.87E-05	5.65E-04	3.03E-03	5.00E-05	1.92E-05	3.47E+00	3.47E+00	1,300
		24- Hr	2ND HIGH	2.97E-04	4.61E-05	2.52E-04	1.50E-03	2.56E-05	8.26E-06	1.65E+00	1.67E+00	260
		ANNUAL	1ST HIGH	1.14E-05	1.75E-06	6.96E-06	5.14E-05	8.64E-07	2.85E-07	1.19E-01	1.42E-01	60
Grand Teton NP Class I Area	NO_2	ANNUAL	1ST HIGH	4.05E-06	1.04E-05	1.58E-05	1.07E-05	5.19E-07	5.94E-08	1.13E-02	3.54E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.03E-02	1.83E-02	3.17E-02	5.40E-03	6.46E-04	1.42E-04	7.35E-01	4.03E+00	150
		ANNUAL	1ST HIGH	2.78E-04	4.98E-04	8.87E-04	2.21E-04	2.22E-05	4.33E-06	4.37E-02	2.95E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	7.01E-03	1.53E-02	2.71E-02	4.81E-03	3.32E-04	1.18E-04	6.43E-01	3.33E+00	35
		ANNUAL	1ST HIGH	1.92E-04	4.20E-04	7.62E-04	1.97E-04	1.14E-05	3.51E-06	3.92E-02	2.26E-01	15
	SO_2	3- Hr	2ND HIGH	9.77E-04	1.49E-04	8.61E-04	1.34E-03	3.30E-05	3.42E-05	2.12E+00	5.97E+00	1,300
		24- Hr	2ND HIGH	2.70E-04	4.22E-05	2.39E-04	4.74E-04	1.33E-05	1.18E-05	5.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	1.02E-05	1.60E-06	7.16E-06	2.28E-05	5.87E-07	3.53E-07	2.36E-02	2.92E-01	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
North Absaorka W Class I Area	NO_2	ANNUAL	1ST HIGH	1.19E-04	3.17E-04	2.24E-04	7.47E-04	3.98E-05	6.04E-07	2.14E-02	2.72E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	3.36E-02	6.10E-02	1.47E-01	3.99E-02	5.97E-03	4.25E-04	1.77E+00	6.53E+00	150
		ANNUAL	1ST HIGH	1.32E-03	2.33E-03	3.61E-03	2.11E-03	2.89E-04	1.61E-05	1.41E-01	3.49E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.26E-02	5.10E-02	1.25E-01	3.40E-02	2.44E-03	3.32E-04	1.47E+00	5.34E+00	35
		ANNUAL	1ST HIGH	8.43E-04	1.89E-03	3.03E-03	1.77E-03	1.23E-04	1.26E-05	1.16E-01	2.91E-01	15
	SO_2	3- Hr	2ND HIGH	2.88E-03	4.48E-04	3.38E-03	1.43E-02	3.97E-04	9.47E-05	5.22E+00	7.73E+00	1,300
		24- Hr	2ND HIGH	1.30E-03	2.04E-04	1.26E-03	5.08E-03	1.52E-04	3.82E-05	1.86E+00	3.46E+00	260
		ANNUAL	1ST HIGH	6.29E-05	1.06E-05	3.62E-05	3.50E-04	9.15E-06	1.50E-06	1.09E-01	2.31E-01	60
North Cheyenne IR Class I Area*	NO_2	1-Hr	1ST HIGH	1.22E+01	2.98E+01	4.28E+02	5.08E-01	6.80E-02	2.68E+00	4.28E+02	4.28E+02	565
		ANNUAL	1ST HIGH	6.27E-02	1.55E-01	1.63E+00	3.58E-03	2.11E-04	1.71E-02	1.78E+00	1.85E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	4.29E-01	4.94E-01	3.92E+00	2.24E-02	7.74E-03	6.24E-02	4.45E+00	8.22E+00	150
		ANNUAL	1ST HIGH	5.28E-02	6.33E-02	4.76E-01	3.25E-03	6.23E-04	6.41E-03	8.15E-01	1.23E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.23E-01	2.21E-01	1.72E+00	1.73E-02	1.74E-03	1.69E-02	3.04E+00	5.82E+00	35
		ANNUAL	1ST HIGH	1.66E-02	3.08E-02	1.98E-01	2.44E-03	1.93E-04	1.83E-03	3.85E-01	6.61E-01	15
	SO_2	1-Hr	1ST HIGH	1.17E+00	1.74E-01	6.55E+00	8.80E-02	8.00E-03	4.63E-01	3.07E+01	3.07E+01	1,300
		3- Hr	2ND HIGH	3.83E-01	5.68E-02	1.67E+00	3.98E-02	3.62E-03	2.17E-01	8.55E+00	1.05E+01	1,300
		24- Hr	2ND HIGH	5.78E-02	8.59E-03	2.29E-01	6.13E-03	5.26E-04	2.81E-02	2.73E+00	4.70E+00	260
		ANNUAL	1ST HIGH	6.47E-03	9.78E-04	2.55E-02	8.64E-04	3.22E-05	3.00E-03	4.68E-01	7.21E-01	60
Red Rock Lakes Class I Area	NO_2	1-Hr	1ST HIGH	1.49E-03	3.64E-03	7.30E-04	2.34E-03	8.34E-05	2.07E-05	6.14E+00	6.14E+00	565
		ANNUAL	1ST HIGH	3.26E-06	8.29E-06	2.82E-06	7.09E-06	2.00E-07	2.36E-08	2.45E-02	3.00E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.20E-03	9.56E-03	1.70E-02	5.19E-03	5.76E-04	1.01E-04	6.32E-01	1.74E+00	150
		ANNUAL	1ST HIGH	1.71E-04	3.06E-04	5.01E-04	1.63E-04	1.29E-05	2.37E-06	5.43E-02	1.37E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.70E-03	8.20E-03	1.44E-02	4.69E-03	3.07E-04	7.93E-05	5.78E-01	1.51E+00	35
		ANNUAL	1ST HIGH	1.18E-04	2.58E-04	4.30E-04	1.45E-04	6.69E-06	1.92E-06	4.67E-02	1.12E-01	15
	SO_2	1-Hr	1ST HIGH	5.67E-04	8.77E-05	3.54E-04	1.62E-03	4.60E-05	2.60E-05	4.98E+00	4.98E+00	1,300
		3- Hr	2ND HIGH	4.91E-04	7.50E-05	3.00E-04	1.19E-03	3.68E-05	1.67E-05	2.56E+00	3.23E+00	1,300
		24- Hr	2ND HIGH	1.80E-04	2.90E-05	1.41E-04	3.82E-04	1.19E-05	6.48E-06	7.30E-01	1.10E+00	260
		ANNUAL	1ST HIGH	6.25E-06	9.72E-07	3.82E-06	1.63E-05	3.32E-07	1.84E-07	3.98E-02	9.60E-02	60
Scapegoat W Class I Area	NO_2	1-Hr	1ST HIGH	1.03E-03	2.65E-03	8.44E-03	2.77E-03	8.00E-05	5.71E-05	3.19E+00	3.19E+00	565
		ANNUAL	1ST HIGH	1.62E-06	4.08E-06	5.66E-06	8.13E-06	1.73E-07	1.84E-08	2.32E-02	2.34E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	5.52E-03	9.93E-03	2.08E-02	6.16E-03	4.44E-04	7.28E-05	2.77E+00	2.82E+00	150
		ANNUAL	1ST HIGH	1.61E-04	2.77E-04	4.75E-04	2.43E-04	1.83E-05	2.12E-06	1.17E-01	1.46E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	3.92E-03	8.50E-03	1.84E-02	5.50E-03	2.29E-04	5.62E-05	1.91E+00	1.91E+00	35
		ANNUAL	1ST HIGH	1.06E-04	2.27E-04	3.98E-04	2.12E-04	8.81E-06	1.62E-06	7.86E-02	1.04E-01	15
	SO_2	1-Hr	1ST HIGH	6.35E-04	1.03E-04	7.65E-04	1.71E-03	3.42E-05	4.44E-05	3.48E+00	4.74E+00	1,300
		3- Hr	2ND HIGH	4.92E-04	7.51E-05	5.00E-04	1.38E-03	2.62E-05	1.92E-05	2.69E+00	2.72E+00	1,300
		24- Hr	2ND HIGH	2.47E-04	3.78E-05	1.86E-04	7.20E-04	1.22E-05	9.12E-06	1.30E+00	1.43E+00	260
		ANNUAL	1ST HIGH	7.23E-06	1.12E-06	4.89E-06	2.93E-05	5.16E-07	2.15E-07	6.57E-02	8.27E-02	60
Teton W Class I Area	NO_2	ANNUAL	1ST HIGH	2.27E-05	6.01E-05	4.14E-05	1.05E-04	5.78E-06	1.69E-07	7.68E-03	2.23E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	3.53E-02	6.45E-02	2.25E-02	2.82E-03	3.10E-04	1.48E+00	4.65E+00	150
		ANNUAL	1ST HIGH	6.09E-04	1.09E-03	1.73E-03	7.28E-04	8.46E-05	9.00E-06	7.65E-02	2.77E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.36E-02	3.00E-02	5.33E-02	1.95E-02	1.33E-03	2.52E-04	1.23E+00	3.94E+00	35
		ANNUAL	1ST HIGH	4.05E-04	8.99E-04	1.46E-03	6.34E-04	4.04E-05	7.18E-06	6.58E-02	2.32E-01	15
	SO_2	3- Hr	2ND HIGH	1.43E-03	2.25E-04	1.71E-03	9.01E-03	2.27E-04	5.11E-05	2.90E+00	5.92E+00	1,300
		24- Hr	2ND HIGH	6.61E-04	1.10E-04	6.03E-04	2.75E-03	7.61E-05	1.84E-05	1.07E+00	2.55E+00	260
		ANNUAL	1ST HIGH	2.48E-05	4.05E-06	1.55E-05	9.08E-05	2.36E-06	7.49E-07	4.53E-02	1.98E-01	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I AREAS												
Theodore Roosevelt NP Class I Area	NO_2	ANNUAL	1ST HIGH	3.96E-04	9.88E-04	1.83E-03	2.99E-04	2.04E-05	4.47E-06	2.85E-02	5.99E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.71E-02	4.95E-02	1.16E-01	2.05E-02	1.79E-03	3.76E-04	1.57E+00	5.64E+00	150
		ANNUAL	1ST HIGH	1.90E-03	3.14E-03	5.89E-03	9.78E-04	1.34E-04	2.26E-05	1.31E-01	4.44E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.85E-02	4.16E-02	9.17E-02	1.84E-02	9.35E-04	2.95E-04	1.23E+00	4.73E+00	35
		ANNUAL	1ST HIGH	1.12E-03	2.43E-03	4.69E-03	8.27E-04	5.58E-05	1.67E-05	9.26E-02	3.32E-01	15
	SO_2	3-Hr	2ND HIGH	2.51E-03	3.75E-04	2.39E-03	2.74E-03	1.25E-04	1.26E-04	2.14E+00	3.66E+01	1,300
		24-Hr	2ND HIGH	1.04E-03	1.57E-04	1.26E-03	1.44E-03	4.77E-05	4.46E-05	1.05E+00	1.09E+01	260
		ANNUAL	1ST HIGH	1.13E-04	1.71E-05	8.50E-05	1.61E-04	5.16E-06	2.81E-06	1.06E-01	8.20E-01	60
UL Bend W Class I Area	NO_2	1-Hr	1ST HIGH	2.42E-02	5.95E-02	1.59E-01	1.08E-01	5.54E-03	3.21E-04	2.30E+00	2.30E+00	565
		ANNUAL	1ST HIGH	1.73E-04	4.30E-04	3.92E-04	1.54E-03	7.16E-05	7.48E-07	5.72E-02	6.19E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.09E-02	3.65E-02	6.82E-02	2.38E-02	2.77E-03	2.03E-04	1.31E+00	2.55E+00	150
		ANNUAL	1ST HIGH	1.10E-03	1.73E-03	2.55E-03	2.01E-03	2.86E-04	9.13E-06	1.84E-01	2.85E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.35E-02	2.99E-02	5.70E-02	1.98E-02	1.24E-03	1.54E-04	1.14E+00	2.35E+00	35
		ANNUAL	1ST HIGH	6.09E-04	1.29E-03	1.96E-03	1.57E-03	1.01E-04	6.36E-06	1.16E-01	1.96E-01	15
	SO_2	1-Hr	1ST HIGH	4.23E-03	6.39E-04	5.60E-03	2.15E-02	5.59E-04	1.42E-04	3.68E+00	1.01E+01	1,300
		3-Hr	2ND HIGH	3.39E-03	5.07E-04	3.43E-03	1.34E-02	2.89E-04	1.17E-04	2.44E+00	5.60E+00	1,300
		24-Hr	2ND HIGH	1.19E-03	1.78E-04	8.88E-04	4.56E-03	1.20E-04	3.12E-05	9.16E-01	2.08E+00	260
		ANNUAL	1ST HIGH	6.99E-05	1.06E-05	4.07E-05	4.74E-04	1.17E-05	1.23E-06	1.35E-01	2.08E-01	60
Washakie W Class I Area	NO_2	ANNUAL	1ST HIGH	9.28E-05	2.49E-04	1.15E-04	5.68E-04	3.18E-05	6.23E-07	1.51E-02	2.44E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	3.18E-02	5.75E-02	1.05E-01	3.69E-02	4.93E-03	4.76E-04	2.13E+00	6.82E+00	150
		ANNUAL	1ST HIGH	1.12E-03	1.99E-03	2.81E-03	1.87E-03	2.53E-04	1.89E-05	1.25E-01	4.17E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	2.07E-02	4.73E-02	8.86E-02	3.14E-02	2.18E-03	3.85E-04	1.84E+00	5.71E+00	35
		ANNUAL	1ST HIGH	7.19E-04	1.62E-03	2.37E-03	1.57E-03	1.10E-04	1.49E-05	1.05E-01	3.50E-01	15
	SO_2	3-Hr	2ND HIGH	3.23E-03	5.37E-04	2.73E-03	1.95E-02	5.20E-04	1.32E-04	6.75E+00	9.41E+00	1,300
		24-Hr	2ND HIGH	1.17E-03	1.90E-04	9.85E-04	5.42E-03	1.48E-04	3.70E-05	2.19E+00	3.88E+00	260
		ANNUAL	1ST HIGH	5.18E-05	8.84E-06	2.69E-05	2.93E-04	7.80E-06	1.71E-06	9.57E-02	2.77E-01	60
Wind Cave NP Class I Area	NO_2	ANNUAL	1ST HIGH	2.48E-04	6.17E-04	1.17E-03	1.12E-04	7.64E-06	3.13E-06	7.68E-03	1.80E-01	100
	PM_{10} Total	24-Hr	2ND HIGH	2.00E-02	3.60E-02	6.56E-02	7.64E-03	9.60E-04	3.52E-04	7.74E-01	7.00E+00	150
		ANNUAL	1ST HIGH	1.99E-03	3.42E-03	6.25E-03	7.68E-04	1.03E-04	2.62E-05	1.03E-01	8.64E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.36E-02	3.03E-02	5.66E-02	6.70E-03	4.81E-04	2.91E-04	6.12E-01	5.57E+00	35
		ANNUAL	1ST HIGH	1.26E-03	2.77E-03	5.17E-03	6.68E-04	4.80E-05	2.02E-05	8.47E-02	5.89E-01	15
	SO_2	3-Hr	2ND HIGH	2.33E-03	3.52E-04	1.72E-03	1.77E-03	9.12E-05	7.04E-05	8.66E-01	8.95E+00	1,300
		24-Hr	2ND HIGH	8.68E-04	1.31E-04	5.67E-04	7.60E-04	3.09E-05	2.51E-05	3.77E-01	3.34E+00	260
		ANNUAL	1ST HIGH	1.08E-04	1.65E-05	8.13E-05	1.08E-04	3.90E-06	2.91E-06	5.90E-02	6.51E-01	60
Yellowstone NP Class I Area	NO_2	ANNUAL	1ST HIGH	1.84E-05	4.83E-05	5.62E-05	6.11E-05	2.96E-06	1.91E-07	3.11E-02	3.34E-02	100
	PM_{10} Total	24-Hr	2ND HIGH	2.37E-02	4.30E-02	1.06E-01	1.33E-02	1.76E-03	4.22E-04	1.42E+00	4.52E+00	150
		ANNUAL	1ST HIGH	6.53E-04	1.17E-03	2.18E-03	6.26E-04	6.31E-05	9.93E-06	1.03E-01	2.56E-01	50
	$PM_{2.5}$ Total	24-Hr	2ND HIGH	1.60E-02	3.60E-02	8.99E-02	1.16E-02	8.63E-04	3.29E-04	1.14E+00	3.84E+00	35
		ANNUAL	1ST HIGH	4.40E-04	9.74E-04	1.86E-03	5.50E-04	3.08E-05	7.94E-06	8.83E-02	2.18E-01	15
	SO_2	3-Hr	2ND HIGH	2.62E-03	4.02E-04	2.66E-03	4.65E-03	1.11E-04	7.43E-05	1.68E+00	3.92E+00	1,300
		24-Hr	2ND HIGH	8.64E-04	1.34E-04	8.55E-04	1.91E-03	4.48E-05	3.55E-05	8.09E-01	2.11E+00	260
		ANNUAL	1ST HIGH	2.57E-05	4.05E-06	1.95E-05	7.04E-05	1.70E-06	8.23E-07	5.67E-02	1.68E-01	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Absaorka Beartooth W Class II Area	NO_2	1-Hr	1ST HIGH	7.70E-02	1.89E-01	2.26E-01	4.93E+00	3.73E-03	5.33E-04	7.48E+00	7.48E+00	565
		ANNUAL	1ST HIGH	3.64E-04	9.31E-04	5.10E-04	1.34E-02	2.35E-05	1.41E-06	1.01E-01	1.03E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.85E-02	6.96E-02	1.85E-01	7.28E-02	6.32E-03	9.25E-04	2.92E+00	5.69E+00	150
		ANNUAL	1ST HIGH	1.97E-03	3.35E-03	5.28E-03	5.18E-03	2.29E-04	2.46E-05	2.45E-01	3.75E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.57E-02	5.79E-02	1.55E-01	4.50E-02	3.05E-03	7.20E-04	2.34E+00	5.19E+00	35
		ANNUAL	1ST HIGH	1.19E-03	2.64E-03	4.38E-03	3.13E-03	9.85E-05	1.86E-05	1.68E-01	3.08E-01	15
	SO_2	1-Hr	1ST HIGH	1.04E-02	1.60E-03	1.16E-02	8.31E-01	4.89E-04	3.92E-04	8.99E+00	9.39E+00	1,300
		3- Hr	2ND HIGH	7.39E-03	1.18E-03	8.18E-03	2.91E-01	3.56E-04	2.62E-04	6.44E+00	7.81E+00	1,300
		24- Hr	2ND HIGH	1.86E-03	2.79E-04	1.62E-03	3.90E-02	1.49E-04	8.27E-05	2.53E+00	3.41E+00	260
		ANNUAL	1ST HIGH	1.09E-04	1.72E-05	5.88E-05	2.64E-03	7.63E-06	2.59E-06	1.85E-01	2.80E-01	60
Agate Fossil Beds NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.12E-04	2.80E-04	5.40E-04	4.80E-05	2.54E-06	2.22E-06	4.57E-03	2.39E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.26E-02	2.26E-02	4.10E-02	5.58E-03	6.16E-04	3.32E-04	5.67E-01	8.22E+00	150
		ANNUAL	1ST HIGH	1.15E-03	1.94E-03	3.78E-03	4.77E-04	5.67E-05	2.09E-05	7.51E-02	8.05E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.72E-03	1.91E-02	3.60E-02	4.92E-03	3.40E-04	2.67E-04	4.84E-01	6.64E+00	35
		ANNUAL	1ST HIGH	7.15E-04	1.55E-03	3.08E-03	4.13E-04	2.68E-05	1.60E-05	6.20E-02	5.54E-01	15
	SO_2	3- Hr	2ND HIGH	1.59E-03	2.35E-04	1.47E-03	1.49E-03	5.42E-05	7.12E-05	9.20E-01	8.05E+00	1,300
		24- Hr	2ND HIGH	5.36E-04	8.02E-05	4.28E-04	4.84E-04	2.02E-05	2.47E-05	3.67E-01	3.20E+00	260
		ANNUAL	1ST HIGH	6.81E-05	1.04E-05	5.44E-05	6.84E-05	2.04E-06	2.42E-06	4.63E-02	7.22E-01	60
Big Horn Canyon NRA Class II Area	NO_2	1-Hr	1ST HIGH	1.67E-01	4.06E-01	1.68E+00	8.08E-02	6.03E-03	1.94E+00	5.59E+01	6.50E+01	565
		ANNUAL	1ST HIGH	2.42E-03	6.12E-03	2.11E-02	2.00E-03	8.76E-05	4.74E-03	4.74E-01	5.17E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	9.97E-02	1.63E-01	4.51E-01	1.88E-02	2.51E-03	6.54E-02	1.58E+01	1.60E+01	150
		ANNUAL	1ST HIGH	6.72E-03	1.06E-02	3.05E-02	2.61E-03	3.58E-04	2.98E-03	1.31E+00	1.66E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	5.76E-02	1.28E-01	3.53E-01	1.53E-02	1.06E-03	2.91E-02	2.81E+00	5.30E+00	35
		ANNUAL	1ST HIGH	3.60E-03	7.79E-03	2.26E-02	2.05E-03	1.31E-04	1.42E-03	2.66E-01	5.02E-01	15
	SO_2	1-Hr	1ST HIGH	2.61E-02	4.14E-03	3.23E-02	1.81E-02	6.40E-04	3.14E-01	2.33E+01	2.69E+01	1,300
		3- Hr	2ND HIGH	1.43E-02	2.26E-03	2.67E-02	1.15E-02	4.59E-04	1.14E-01	1.24E+01	1.31E+01	1,300
		24- Hr	2ND HIGH	6.05E-03	9.47E-04	8.72E-03	3.51E-03	9.98E-05	1.70E-02	2.96E+00	4.79E+00	260
		ANNUAL	1ST HIGH	4.57E-04	7.29E-05	5.76E-04	6.26E-04	1.47E-05	8.40E-04	4.43E-01	6.11E-01	60
Black Elk W Class II Area	NO_2	ANNUAL	1ST HIGH	2.25E-04	5.63E-04	9.70E-04	1.13E-04	7.71E-06	2.30E-06	7.50E-03	1.78E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.02E-02	3.64E-02	6.12E-02	7.54E-03	1.03E-03	3.60E-04	7.55E-01	6.71E+00	150
		ANNUAL	1ST HIGH	1.88E-03	3.22E-03	5.77E-03	7.37E-04	9.84E-05	2.42E-05	1.02E-01	8.19E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.38E-02	3.07E-02	5.29E-02	6.63E-03	4.96E-04	2.99E-04	6.29E-01	5.28E+00	35
		ANNUAL	1ST HIGH	1.19E-03	2.61E-03	4.78E-03	6.40E-04	4.56E-05	1.88E-05	8.34E-02	5.29E-01	15
	SO_2	3- Hr	2ND HIGH	1.79E-03	2.71E-04	1.58E-03	1.60E-03	8.50E-05	6.62E-05	9.42E-01	6.85E+00	1,300
		24- Hr	2ND HIGH	8.03E-04	1.20E-04	5.55E-04	7.18E-04	3.23E-05	2.69E-05	3.07E-01	2.80E+00	260
		ANNUAL	1ST HIGH	1.04E-04	1.59E-05	7.46E-05	1.05E-04	3.80E-06	2.65E-06	5.79E-02	5.44E-01	60
Cloud Peak Class II Area	NO_2	ANNUAL	1ST HIGH	1.09E-03	2.67E-03	6.77E-03	2.97E-04	7.50E-06	3.53E-05	2.77E-02	5.96E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.53E-01	2.73E-01	6.57E-01	2.07E-02	2.10E-03	1.23E-03	1.95E+00	6.11E+00	150
		ANNUAL	1ST HIGH	4.73E-03	7.87E-03	1.94E-02	1.14E-03	1.12E-04	1.02E-04	1.76E-01	5.47E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.04E-01	2.29E-01	5.59E-01	1.84E-02	1.03E-03	9.57E-04	1.61E+00	4.84E+00	35
		ANNUAL	1ST HIGH	2.86E-03	6.19E-03	1.56E-02	9.70E-04	5.17E-05	7.25E-05	1.33E-01	4.13E-01	15
	SO_2	3- Hr	2ND HIGH	2.01E-02	3.04E-03	1.35E-02	8.99E-03	1.45E-04	3.61E-04	1.82E+00	5.04E+00	1,300
		24- Hr	2ND HIGH	6.29E-03	9.58E-04	5.60E-03	2.07E-03	5.68E-05	1.01E-04	5.97E-01	2.54E+00	260
		ANNUAL	1ST HIGH	2.47E-04	3.83E-05	2.49E-04	1.72E-04	3.64E-06	1.50E-05	9.77E-02	2.71E-01	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Crow IR Class II Area*	NO_2	1-Hr	1ST HIGH	4.38E+01	1.13E+02	3.22E+02	7.88E+01	1.46E+00	1.15E+01	**1.59E+03**	**1.59E+03**	565
		ANNUAL	1ST HIGH	1.10E-01	2.82E-01	1.64E+00	1.12E-01	2.34E-03	4.64E-02	7.08E+00	7.12E+00	100
	PM_{10} Total	24- Hr	2ND HIGH	9.78E-01	1.16E+00	4.59E+00	4.59E-01	6.05E-02	2.39E-01	**2.04E+02**	**2.05E+02**	150
		ANNUAL	1ST HIGH	8.58E-02	1.03E-01	4.93E-01	2.50E-02	3.60E-03	1.83E-02	1.51E+01	1.54E+01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.63E-01	4.84E-01	1.80E+00	1.70E-01	1.22E-02	9.30E-02	4.18E+00	7.55E+00	35
		ANNUAL	1ST HIGH	2.48E-02	4.81E-02	2.11E-01	1.09E-02	8.10E-04	6.15E-03	4.23E-01	7.58E-01	15
	SO_2	1-Hr	1ST HIGH	4.21E+00	6.25E-01	4.93E+00	1.27E+01	5.06E-02	1.88E+00	2.54E+02	2.54E+02	1,300
		3- Hr	2ND HIGH	9.95E-01	1.48E-01	1.50E+00	2.14E+00	1.80E-02	4.11E-01	1.06E+02	1.06E+02	1,300
		24- Hr	2ND HIGH	1.31E-01	1.95E-02	2.74E-01	3.96E-01	2.56E-03	8.78E-02	1.59E+01	1.65E+01	260
		ANNUAL	1ST HIGH	1.11E-02	2.27E-03	2.57E-02	1.91E-02	1.49E-04	7.45E-03	2.45E+00	2.62E+00	60
Devils Tower NM Class II Area	NO_2	ANNUAL	1ST HIGH	1.93E-03	4.81E-03	6.35E-03	9.27E-04	7.15E-05	1.49E-05	3.16E-02	5.10E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.79E-02	5.94E-02	1.22E-01	8.43E-03	1.95E-03	4.83E-04	9.29E-01	5.35E+00	150
		ANNUAL	1ST HIGH	4.69E-03	7.35E-03	1.17E-02	1.37E-03	2.65E-04	4.58E-05	1.47E-01	1.16E+00	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.98E-02	4.31E-02	1.05E-01	7.37E-03	7.21E-04	3.95E-04	8.09E-01	4.22E+00	35
		ANNUAL	1ST HIGH	2.51E-03	5.39E-03	9.05E-03	1.10E-03	9.53E-05	3.32E-05	1.12E-01	5.58E-01	15
	SO_2	3- Hr	2ND HIGH	5.88E-03	8.74E-04	3.78E-03	4.61E-03	3.62E-04	2.66E-04	1.59E+00	1.53E+01	1,300
		24- Hr	2ND HIGH	2.49E-03	3.73E-04	1.42E-03	1.38E-03	1.05E-04	6.70E-05	6.24E-01	5.61E+00	260
		ANNUAL	1ST HIGH	3.55E-04	5.36E-05	2.12E-04	3.09E-04	1.40E-05	6.52E-06	9.96E-02	9.70E-01	60
Fort Belknap IR Class II Area	NO_2	1-Hr	1ST HIGH	1.42E-02	3.70E-02	1.28E-01	4.13E-02	2.36E-03	1.44E-04	3.46E+00	3.46E+00	565
		ANNUAL	1ST HIGH	7.12E-05	1.79E-04	1.70E-04	4.89E-04	2.35E-05	2.64E-07	8.45E-02	8.63E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	1.91E-02	3.38E-02	8.00E-02	1.71E-02	1.74E-03	2.97E-04	1.19E+00	2.35E+00	150
		ANNUAL	1ST HIGH	7.21E-04	1.14E-03	1.80E-03	1.12E-03	1.49E-04	6.57E-06	1.84E-01	2.56E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.26E-02	2.80E-02	6.66E-02	1.45E-02	7.09E-04	2.45E-04	1.02E+00	2.18E+00	35
		ANNUAL	1ST HIGH	4.10E-04	8.67E-04	1.39E-03	8.98E-04	5.69E-05	4.76E-06	1.10E-01	1.72E-01	15
	SO_2	1-Hr	1ST HIGH	4.01E-03	6.01E-04	3.92E-03	9.13E-03	2.80E-04	1.52E-04	3.09E+00	7.62E+00	1,300
		3- Hr	2ND HIGH	2.81E-03	4.25E-04	2.45E-03	6.76E-03	2.04E-04	7.61E-05	2.11E+00	5.53E+00	1,300
		24- Hr	2ND HIGH	1.11E-03	1.65E-04	7.63E-04	2.47E-03	6.89E-05	2.36E-05	6.99E-01	1.81E+00	260
		ANNUAL	1ST HIGH	4.36E-05	6.60E-06	2.78E-05	2.18E-04	5.58E-06	8.54E-07	1.47E-01	1.92E-01	60
Fort Laramie NHS Class II Area	NO_2	ANNUAL	1ST HIGH	8.12E-05	2.04E-04	4.22E-04	3.54E-05	1.85E-06	1.87E-06	3.10E-03	3.57E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.33E-02	2.45E-02	4.23E-02	5.58E-03	7.07E-04	1.94E-04	5.57E-01	7.42E+00	150
		ANNUAL	1ST HIGH	1.03E-03	1.75E-03	3.24E-03	4.35E-04	5.28E-05	1.87E-05	6.77E-02	9.48E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.25E-03	2.09E-02	3.58E-02	4.88E-03	3.46E-04	1.50E-04	4.74E-01	5.56E+00	35
		ANNUAL	1ST HIGH	6.46E-04	1.40E-03	2.65E-03	3.79E-04	2.54E-05	1.44E-05	5.63E-02	6.15E-01	15
	SO_2	3- Hr	2ND HIGH	1.90E-03	2.90E-04	1.52E-03	1.63E-03	6.85E-05	1.11E-04	9.22E-01	1.66E+01	1,300
		24- Hr	2ND HIGH	5.69E-04	8.62E-05	4.19E-04	6.00E-04	2.05E-05	2.31E-05	3.51E-01	4.23E+00	260
		ANNUAL	1ST HIGH	5.76E-05	8.84E-06	4.47E-05	5.92E-05	1.81E-06	2.12E-06	3.86E-02	9.21E-01	60
Jedediah Smith W Class II Area	NO_2	ANNUAL	1ST HIGH	2.67E-06	6.85E-06	9.35E-06	7.86E-06	3.67E-07	4.16E-08	1.17E-02	4.32E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	8.55E-03	1.55E-02	2.96E-02	3.62E-03	4.54E-04	1.33E-04	6.76E-01	3.54E+00	150
		ANNUAL	1ST HIGH	2.21E-04	3.96E-04	6.97E-04	1.72E-04	1.63E-05	3.32E-06	4.53E-02	3.18E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	6.15E-03	1.34E-02	2.52E-02	3.28E-03	2.45E-04	1.10E-04	5.84E-01	3.02E+00	35
		ANNUAL	1ST HIGH	1.53E-04	3.35E-04	5.99E-04	1.53E-04	8.45E-06	2.70E-06	4.06E-02	2.38E-01	15
	SO_2	3- Hr	2ND HIGH	8.76E-04	1.33E-04	6.46E-04	1.01E-03	2.44E-05	2.92E-05	2.31E+00	6.67E+00	1,300
		24- Hr	2ND HIGH	2.22E-04	3.49E-05	2.22E-04	3.83E-04	1.14E-05	1.07E-05	5.48E-01	2.08E+00	260
		ANNUAL	1ST HIGH	7.85E-06	1.22E-06	5.33E-06	1.74E-05	4.27E-07	2.73E-07	2.45E-02	3.53E-01	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Jewel Cave NM Class II Area	NO_2	ANNUAL	1ST HIGH	3.01E-04	7.50E-04	1.45E-03	1.06E-04	6.25E-06	3.79E-06	8.99E-03	2.05E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.27E-02	3.90E-02	7.11E-02	7.93E-03	9.39E-04	3.33E-04	7.44E-01	6.67E+00	150
		ANNUAL	1ST HIGH	2.00E-03	3.41E-03	6.38E-03	7.21E-04	9.04E-05	2.70E-05	1.05E-01	8.91E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.52E-02	3.37E-02	6.25E-02	7.23E-03	4.98E-04	2.75E-04	6.24E-01	5.18E+00	35
		ANNUAL	1ST HIGH	1.26E-03	2.74E-03	5.26E-03	6.27E-04	4.22E-05	2.08E-05	8.58E-02	5.75E-01	15
	SO_2	3- Hr	2ND HIGH	2.41E-03	3.64E-04	1.59E-03	1.52E-03	8.31E-05	6.52E-05	7.08E-01	7.28E+00	1,300
		24- Hr	2ND HIGH	9.13E-04	1.39E-04	5.85E-04	7.00E-04	3.38E-05	2.71E-05	4.20E-01	2.77E+00	260
		ANNUAL	1ST HIGH	1.13E-04	1.72E-05	8.57E-05	9.99E-05	3.35E-06	3.01E-06	6.09E-02	7.43E-01	60
Lee Metcalf W Class II Area	NO_2	1-Hr	1ST HIGH	2.27E-03	5.55E-03	5.97E-03	6.62E-03	2.40E-04	4.77E-05	1.16E+01	1.16E+01	565
		ANNUAL	1ST HIGH	1.54E-05	3.87E-05	1.11E-05	3.68E-05	8.38E-07	4.40E-08	1.50E-01	1.51E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.28E-02	2.28E-02	4.94E-02	1.38E-02	8.85E-04	2.83E-04	2.57E+00	3.42E+00	150
		ANNUAL	1ST HIGH	3.98E-04	7.03E-04	1.03E-03	4.87E-04	3.39E-05	4.83E-06	2.05E-01	2.61E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	8.41E-03	1.88E-02	4.15E-02	1.23E-02	4.58E-04	2.35E-04	2.20E+00	2.87E+00	35
		ANNUAL	1ST HIGH	2.66E-04	5.85E-04	8.80E-04	4.29E-04	1.71E-05	3.86E-06	1.60E-01	2.08E-01	15
	SO_2	1-Hr	1ST HIGH	1.58E-03	2.41E-04	1.01E-03	4.61E-03	6.68E-05	8.38E-05	8.73E+00	8.74E+00	1,300
		3- Hr	2ND HIGH	1.43E-03	2.19E-04	9.22E-04	2.79E-03	5.64E-05	7.40E-05	4.97E+00	4.97E+00	1,300
		24- Hr	2ND HIGH	4.73E-04	7.37E-05	3.82E-04	1.11E-03	2.43E-05	1.58E-05	1.53E+00	1.69E+00	260
		ANNUAL	1ST HIGH	1.70E-05	2.62E-06	8.85E-06	5.62E-05	9.34E-07	3.96E-07	1.77E-01	2.09E-01	60
Mt Naomi W Class II Area	NO_2	ANNUAL	1ST HIGH	3.57E-06	8.96E-06	2.11E-05	1.25E-06	6.47E-08	1.99E-08	5.24E-04	1.20E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.42E-03	5.68E-03	8.61E-03	1.73E-03	1.77E-04	5.13E-05	2.11E-01	5.23E+00	150
		ANNUAL	1ST HIGH	8.34E-05	1.45E-04	2.72E-04	4.02E-05	4.69E-06	9.85E-07	8.36E-03	2.23E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.13E-03	4.51E-03	7.05E-03	1.55E-03	9.42E-05	3.62E-05	1.77E-01	3.65E+00	35
		ANNUAL	1ST HIGH	5.50E-05	1.19E-04	2.27E-04	3.54E-05	2.39E-06	7.68E-07	7.38E-03	1.57E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	2.34E-04	1.36E-03	1.02E-03	1.96E-05	2.37E-05	5.26E-01	2.02E+01	1,300
		24- Hr	2ND HIGH	1.44E-04	2.18E-05	1.41E-04	2.08E-04	6.09E-06	7.37E-06	1.21E-01	6.02E+00	260
		ANNUAL	1ST HIGH	4.14E-06	6.37E-07	3.19E-06	4.79E-06	1.37E-07	1.02E-07	3.77E-03	3.75E-01	60
Mt Rushmore Class II Area	NO_2	ANNUAL	1ST HIGH	2.28E-04	5.69E-04	9.52E-04	1.16E-04	7.90E-06	2.31E-06	7.40E-03	2.00E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.94E-02	3.50E-02	6.07E-02	7.60E-03	1.02E-03	3.47E-04	7.31E-01	6.86E+00	150
		ANNUAL	1ST HIGH	1.87E-03	3.22E-03	5.76E-03	7.38E-04	9.88E-05	2.42E-05	1.02E-01	8.53E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.32E-02	2.95E-02	5.12E-02	6.68E-03	5.03E-04	2.88E-04	6.08E-01	5.31E+00	35
		ANNUAL	1ST HIGH	1.19E-03	2.60E-03	4.77E-03	6.40E-04	4.57E-05	1.88E-05	8.33E-02	5.22E-01	15
	SO_2	3- Hr	2ND HIGH	1.77E-03	2.68E-04	1.56E-03	1.59E-03	8.31E-05	6.78E-05	9.45E-01	6.89E+00	1,300
		24- Hr	2ND HIGH	8.05E-04	1.20E-04	5.59E-04	7.19E-04	3.13E-05	2.65E-05	3.05E-01	2.71E+00	260
		ANNUAL	1ST HIGH	1.05E-04	1.59E-05	7.47E-05	1.06E-04	3.83E-06	2.66E-06	5.78E-02	5.28E-01	60
Popo Agie W Class II Area	NO_2	ANNUAL	1ST HIGH	3.18E-05	8.06E-05	1.49E-04	4.03E-05	2.11E-06	5.54E-07	3.09E-03	9.44E-02	100
	PM_{10} Total	24- Hr	2ND HIGH	2.73E-02	4.79E-02	6.61E-02	9.51E-03	9.76E-04	3.27E-04	1.28E+00	1.01E+01	150
		ANNUAL	1ST HIGH	7.20E-04	1.26E-03	2.07E-03	5.05E-04	5.67E-05	1.21E-05	6.28E-02	5.50E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.80E-02	3.95E-02	5.57E-02	8.68E-03	5.28E-04	2.67E-04	1.10E+00	8.36E+00	35
		ANNUAL	1ST HIGH	4.76E-04	1.04E-03	1.74E-03	4.43E-04	2.79E-05	9.57E-06	5.41E-02	4.38E-01	15
	SO_2	3- Hr	2ND HIGH	2.97E-03	4.57E-04	3.92E-03	2.73E-03	6.28E-05	9.77E-05	2.30E+00	1.42E+01	1,300
		24- Hr	2ND HIGH	9.11E-04	1.37E-04	7.25E-04	1.05E-03	2.53E-05	2.77E-05	8.84E-01	5.43E+00	260
		ANNUAL	1ST HIGH	3.29E-05	5.14E-06	2.21E-05	6.06E-05	1.60E-06	1.16E-06	3.36E-02	4.87E-01	60

Table C-5 Modeled Concentrations of NO_2, PM_{10}, $PM_{2.5}$ and SO_2 for Alternative H Revised -Scenario 2A

Receptor Set	Pollutant	Averaging Period	RANK	Modeled Concentration ($\mu g/m^3$)								NAAQS/SAAQS ($\mu g/m^3$)
				MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
SENSITIVE CLASS II AREAS												
Soldier Creek WA Class II Area	NO_2	ANNUAL	1ST HIGH	1.71E-04	4.25E-04	8.57E-04	7.14E-05	3.89E-06	2.86E-06	6.30E-03	2.42E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	1.41E-02	2.53E-02	4.70E-02	5.67E-03	5.79E-04	2.91E-04	7.15E-01	7.90E+00	150
		ANNUAL	1ST HIGH	1.44E-03	2.44E-03	4.75E-03	5.65E-04	6.70E-05	2.36E-05	8.65E-02	8.86E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	9.72E-03	2.14E-02	4.15E-02	5.03E-03	3.31E-04	2.30E-04	5.94E-01	6.07E+00	35
		ANNUAL	1ST HIGH	8.98E-04	1.95E-03	3.89E-03	4.90E-04	3.16E-05	1.80E-05	7.09E-02	5.90E-01	15
	SO_2	3- Hr	2ND HIGH	1.49E-03	2.25E-04	1.51E-03	1.05E-03	5.49E-05	6.45E-05	9.98E-01	9.46E+00	1,300
		24- Hr	2ND HIGH	5.99E-04	9.15E-05	5.30E-04	4.97E-04	1.91E-05	2.50E-05	3.89E-01	3.41E+00	260
		ANNUAL	1ST HIGH	8.45E-05	1.29E-05	6.72E-05	8.10E-05	2.46E-06	2.74E-06	5.39E-02	7.34E-01	60
Wellsville Mountain W Class II Area	NO_2	ANNUAL	1ST HIGH	3.03E-06	7.58E-06	1.76E-05	9.32E-07	4.20E-08	1.38E-08	2.20E-04	1.12E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	2.22E-03	3.69E-03	6.62E-03	1.73E-03	1.49E-04	4.01E-05	1.99E-01	3.47E+00	150
		ANNUAL	1ST HIGH	6.40E-05	1.11E-04	2.15E-04	2.94E-05	3.28E-06	7.05E-07	5.69E-03	1.80E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	1.40E-03	2.96E-03	5.72E-03	1.55E-03	7.88E-05	2.79E-05	1.66E-01	2.08E+00	35
		ANNUAL	1ST HIGH	4.23E-05	9.17E-05	1.79E-04	2.58E-05	1.67E-06	5.49E-07	4.97E-03	1.05E-01	15
	SO_2	3- Hr	2ND HIGH	1.57E-03	2.36E-04	1.40E-03	9.36E-04	1.33E-05	1.63E-05	4.99E-01	6.11E+00	1,300
		24- Hr	2ND HIGH	1.01E-04	1.59E-05	1.13E-04	2.10E-04	4.75E-06	4.66E-06	1.10E-01	2.71E+00	260
		ANNUAL	1ST HIGH	3.25E-06	4.97E-07	2.60E-06	3.55E-06	9.55E-08	7.25E-08	2.46E-03	1.50E-01	60
Wind River IR Class II Area	NO_2	ANNUAL	1ST HIGH	1.17E-04	2.96E-04	5.59E-04	3.50E-04	1.84E-05	2.46E-06	1.14E-02	7.34E-01	100
	PM_{10} Total	24- Hr	2ND HIGH	3.25E-02	6.07E-02	1.24E-01	2.55E-02	2.76E-03	6.04E-04	2.03E+00	1.18E+01	150
		ANNUAL	1ST HIGH	1.46E-03	2.54E-03	4.33E-03	1.50E-03	1.88E-04	3.41E-05	1.36E-01	9.37E-01	50
	$PM_{2.5}$ Total	24- Hr	2ND HIGH	2.30E-02	5.15E-02	1.03E-01	2.32E-02	1.43E-03	4.68E-04	1.77E+00	9.77E+00	35
		ANNUAL	1ST HIGH	9.46E-04	2.08E-03	3.61E-03	1.28E-03	8.54E-05	2.66E-05	1.15E-01	6.74E-01	15
	SO_2	3- Hr	2ND HIGH	4.18E-03	6.42E-04	5.54E-03	6.70E-03	1.87E-04	2.03E-04	4.15E+00	1.84E+02	1,300
		24- Hr	2ND HIGH	1.29E-03	1.96E-04	1.37E-03	3.04E-03	7.75E-05	6.37E-05	1.81E+00	3.47E+01	260
		ANNUAL	1ST HIGH	7.09E-05	1.11E-05	5.10E-05	2.29E-04	5.86E-06	3.57E-06	9.70E-02	4.99E+00	60

Table C-6 Modeled Deposition for Nitrogen and Sulfur - Alternative H Revised

Note: Bold type indicate a modeled impact that is above the Comparative Deposition Value

Receptor Set	**POLLUTANT**	*Maximum Deposition (kg/ha - yr)*								**Comparative Deposition Value (kg/ha - yr)**
		MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
CLASS I AREAS										
Badlands NP Class I Area	Nitrogen	2.10E-04	1.92E-03	1.00E-03	1.43E-04	1.54E-05	3.84E-06	1.92E-02	1.20E-01	3
	Sulfur	4.20E-05	1.23E-05	3.24E-05	4.68E-05	2.97E-06	1.23E-06	2.60E-02	1.83E-01	5
Bridger W Class I Area	Nitrogen	1.63E-05	1.45E-04	8.29E-05	2.55E-05	2.06E-06	3.79E-07	1.03E-02	1.78E-02	3
	Sulfur	3.69E-06	1.09E-06	3.06E-06	9.98E-06	4.63E-07	1.32E-07	1.48E-02	2.69E-02	5
Bob Marshall W Class I Area	Nitrogen	4.71E-05	4.27E-04	2.25E-04	5.22E-05	4.07E-06	9.64E-07	8.07E-03	1.14E-01	3
	Sulfur	1.17E-05	3.54E-06	8.24E-06	2.20E-05	9.12E-07	4.04E-07	1.24E-02	2.38E-01	5
Fitzpatrick W Class I Area	Nitrogen	5.63E-05	5.14E-04	2.58E-04	7.60E-05	5.71E-06	1.21E-06	9.65E-03	1.30E-01	3
	Sulfur	1.24E-05	3.78E-06	8.70E-06	2.86E-05	1.20E-06	4.27E-07	1.64E-02	1.87E-01	5
Fort Peck IR Class I Area	Nitrogen	1.93E-04	1.77E-03	7.75E-04	2.45E-04	2.77E-05	3.10E-06	2.55E-02	7.80E-02	3
	Sulfur	3.28E-05	9.59E-06	2.18E-05	7.40E-05	4.54E-06	8.97E-07	3.72E-02	1.46E-01	5
Gates of the Mountain W Class I Area	Nitrogen	5.57E-05	5.01E-04	2.32E-04	1.16E-04	8.70E-06	1.10E-06	7.56E-02	9.35E-02	3
	Sulfur	1.16E-05	3.45E-06	7.58E-06	4.30E-05	1.82E-06	3.41E-07	8.20E-02	1.11E-01	5
Grand Teton NP Class I Area	Nitrogen	4.83E-05	4.37E-04	2.26E-04	5.81E-05	4.48E-06	1.21E-06	1.67E-02	6.52E-02	3
	Sulfur	8.25E-06	2.48E-06	5.84E-06	1.70E-05	7.41E-07	3.01E-07	1.74E-02	1.78E-01	5
North Absaorka W Class I Are	Nitrogen	2.03E-04	1.90E-03	8.01E-04	6.40E-04	4.23E-05	3.35E-06	5.15E-02	1.29E-01	3
	Sulfur	3.69E-05	1.17E-05	2.32E-05	1.86E-04	6.60E-06	1.04E-06	7.28E-02	2.13E-01	5
North Cheyenne IR Class I Area	Nitrogen	2.46E-02	2.35E-01	1.74E+00	1.96E-03	1.38E-04	1.09E-02	1.94E+00	2.12E+00	3
	Sulfur	2.34E-03	6.73E-04	2.36E-02	4.11E-04	1.97E-05	1.57E-03	2.66E-01	4.81E-01	5
Red Rock Lakes Class I Area	Nitrogen	3.12E-05	2.84E-04	1.41E-04	4.75E-05	3.64E-06	9.16E-07	2.59E-02	4.54E-02	3
	Sulfur	5.19E-06	1.56E-06	3.57E-06	1.25E-05	5.31E-07	2.32E-07	2.41E-02	6.51E-02	5
Scapegoat W Class I Area	Nitrogen	3.71E-05	3.31E-04	1.65E-04	7.01E-05	5.36E-06	7.77E-07	2.72E-02	4.11E-02	3
	Sulfur	8.05E-06	2.38E-06	5.66E-06	2.68E-05	1.15E-06	2.57E-07	3.83E-02	6.12E-02	5
Teton W Class I Area	Nitrogen	8.10E-05	7.45E-04	3.57E-04	1.66E-04	1.24E-05	1.69E-06	1.99E-02	8.34E-02	3
	Sulfur	1.57E-05	4.84E-06	1.08E-05	5.05E-05	2.02E-06	5.12E-07	2.89E-02	1.61E-01	5
Theodore Roosevelt NP Class I Area	Nitrogen	2.84E-04	2.63E-03	1.40E-03	2.36E-04	2.35E-05	6.69E-06	3.17E-02	2.57E-01	3
	Sulfur	4.78E-05	1.40E-05	3.74E-05	6.87E-05	3.85E-06	1.72E-06	4.83E-02	3.53E-01	5
UL Bend W Class I Area	Nitrogen	2.08E-04	1.91E-03	7.31E-04	6.44E-04	7.77E-05	2.55E-06	5.33E-02	9.03E-02	3
	Sulfur	3.90E-05	1.14E-05	2.46E-05	1.56E-04	1.00E-05	8.68E-07	6.71E-02	1.22E-01	5
Washakie W Class I Area	Nitrogen	1.69E-04	1.58E-03	6.79E-04	4.96E-04	3.39E-05	4.19E-06	3.79E-02	1.24E-01	3
	Sulfur	3.02E-05	9.69E-06	1.85E-05	1.45E-04	5.22E-06	1.09E-06	5.94E-02	2.37E-01	5
Wind Cave NP Class I Area	Nitrogen	2.98E-04	2.74E-03	1.38E-03	1.67E-04	1.73E-05	4.46E-06	2.24E-02	2.07E-01	3
	Sulfur	5.82E-05	1.71E-05	4.30E-05	5.94E-05	3.68E-06	1.55E-06	3.26E-02	3.57E-01	5
Yellowstone NP Class I Area	Nitrogen	1.11E-04	1.01E-03	5.50E-04	1.64E-04	1.28E-05	2.31E-06	4.70E-02	8.54E-02	3
	Sulfur	1.90E-05	5.70E-06	1.51E-05	4.80E-05	2.05E-06	6.87E-07	4.43E-02	1.36E-01	5

Table C-6 Modeled Deposition for Nitrogen and Sulfur - Alternative H Revised

Receptor Set	POLLUTANT	*Maximum Deposition (kg/ha - yr)*								Comparative Deposition Value (kg/ha - yr)
		MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
CLASS I / CLASS II SENSITIVE LAKES										
Black Joe Lake, Bridger WA	Nitrogen	4.44E-05	4.07E-04	1.98E-04	5.20E-05	3.75E-06	9.09E-07	8.08E-03	9.62E-02	3
	Sulfur	1.17E-05	3.55E-06	8.26E-06	2.21E-05	9.14E-07	4.05E-07	1.23E-02	2.15E-01	5
Deep Lake, Bridger WA	Nitrogen	4.32E-05	3.96E-04	1.93E-04	5.01E-05	3.63E-06	8.90E-07	7.96E-03	9.81E-02	3
	Sulfur	1.15E-05	3.47E-06	8.07E-06	2.14E-05	8.89E-07	3.96E-07	1.20E-02	2.16E-01	5
Emerald Lake, Cloud Peak WA	Nitrogen	5.30E-04	4.85E-03	3.27E-03	3.30E-04	2.79E-05	2.31E-05	4.77E-02	1.64E-01	3
	Sulfur	8.91E-05	2.66E-05	8.55E-05	9.98E-05	4.93E-06	6.41E-06	6.35E-02	2.34E-01	5
Florence, Cloud Peak WA,	Nitrogen	5.41E-04	4.94E-03	3.08E-03	3.25E-04	2.78E-05	2.02E-05	4.62E-02	1.69E-01	3
	Sulfur	9.20E-05	2.73E-05	8.33E-05	9.91E-05	4.99E-06	5.79E-06	6.24E-02	2.42E-01	5
Hobbs Lake, Bridger WA	Nitrogen	3.75E-05	3.40E-04	1.80E-04	3.65E-05	2.89E-06	7.78E-07	6.83E-03	8.82E-02	3
	Sulfur	8.96E-06	2.70E-06	6.63E-06	1.56E-05	7.02E-07	3.19E-07	9.90E-03	1.82E-01	5
Lower Saddlebag, Popo Agie WA	Nitrogen	4.60E-05	4.22E-04	2.02E-04	5.42E-05	3.87E-06	9.38E-07	8.04E-03	1.15E-01	3
	Sulfur	1.22E-05	3.69E-06	8.50E-06	2.25E-05	9.27E-07	4.13E-07	1.21E-02	2.55E-01	5
Ross Lake, Cloud Peak WA	Nitrogen	4.97E-05	4.52E-04	2.34E-04	5.93E-05	4.55E-06	1.04E-06	8.52E-03	8.93E-02	3
	Sulfur	1.09E-05	3.31E-06	7.89E-06	2.29E-05	9.86E-07	3.74E-07	1.37E-02	1.76E-01	5
Upper Frozen Lake, Bridger WA	Nitrogen	4.22E-05	3.86E-04	1.88E-04	4.85E-05	3.52E-06	8.71E-07	7.85E-03	1.03E-01	3
	Sulfur	1.12E-05	3.40E-06	7.91E-06	2.07E-05	8.65E-07	3.87E-07	1.17E-02	2.22E-01	5

Table C-7 Modeled Deposition for Nitrogen and Sulfur - Alternative H Revised- Scenario 1A

Note: Bold type indicate a modeled impact that is above the Comparative Deposition Value

Receptor Set	**POLLUTANT**	*Maximum Deposition (kg/ha - yr)*								**Comparative Deposition Value (kg/ha - yr)**
		MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
CLASS I AREAS										
Badlands NP Class I Area	Nitrogen	2.10E-04	2.38E-06	1.00E-03	1.43E-04	1.54E-05	3.84E-06	5.71E-05	3.76E-04	3
	Sulfur	4.20E-05	2.03E-08	3.24E-05	4.68E-05	2.97E-06	1.23E-06	8.24E-05	5.80E-04	5
Bob Marshall W Class I Area	Nitrogen	1.63E-05	1.79E-07	8.29E-05	2.55E-05	2.06E-06	3.79E-07	3.23E-05	5.62E-05	3
	Sulfur	3.69E-06	1.80E-09	3.06E-06	9.98E-06	4.63E-07	1.32E-07	4.69E-05	8.54E-05	5
Bridger W Class I Area	Nitrogen	4.71E-05	5.28E-07	2.25E-04	5.22E-05	4.07E-06	9.64E-07	2.48E-05	3.60E-04	3
	Sulfur	1.17E-05	5.83E-09	8.24E-06	2.20E-05	9.12E-07	4.04E-07	3.94E-05	7.56E-04	5
Fitzpatrick W Class I Area	Nitrogen	5.63E-05	6.35E-07	2.58E-04	7.60E-05	5.71E-06	1.21E-06	2.96E-05	4.11E-04	3
	Sulfur	1.24E-05	6.22E-09	8.70E-06	2.86E-05	1.20E-06	4.27E-07	5.19E-05	5.94E-04	5
Fort Peck IR Class I Area	Nitrogen	1.93E-04	2.19E-06	7.75E-04	2.45E-04	2.77E-05	3.10E-06	7.79E-05	2.44E-04	3
	Sulfur	3.28E-05	1.58E-08	2.18E-05	7.40E-05	4.54E-06	8.97E-07	1.18E-04	4.62E-04	5
Gates of the Mountain W Class I Area	Nitrogen	5.57E-05	6.20E-07	2.32E-04	1.16E-04	8.70E-06	1.10E-06	2.39E-04	2.96E-04	3
	Sulfur	1.16E-05	5.68E-09	7.58E-06	4.30E-05	1.82E-06	3.41E-07	2.60E-04	3.51E-04	5
Grand Teton NP Class I Area	Nitrogen	4.83E-05	5.41E-07	2.26E-04	5.81E-05	4.48E-06	1.21E-06	5.24E-05	2.06E-04	3
	Sulfur	8.25E-06	4.09E-09	5.84E-06	1.70E-05	7.41E-07	3.01E-07	5.51E-05	5.64E-04	5
North Absaorka W Class I Are	Nitrogen	2.03E-04	2.35E-06	8.01E-04	6.40E-04	4.23E-05	3.35E-06	1.59E-04	4.06E-04	3
	Sulfur	3.69E-05	1.92E-08	2.32E-05	1.86E-04	6.60E-06	1.04E-06	2.31E-04	6.76E-04	5
North Cheyenne IR Class I Area	Nitrogen	2.46E-02	2.90E-04	1.74E+00	1.96E-03	1.38E-04	1.09E-02	5.95E-03	6.52E-03	3
	Sulfur	2.34E-03	1.11E-06	2.36E-02	4.11E-04	1.97E-05	1.57E-03	8.42E-04	1.53E-03	5
Red Rock Lakes Class I Area	Nitrogen	3.12E-05	3.52E-07	1.41E-04	4.75E-05	3.64E-06	9.16E-07	8.16E-05	1.43E-04	3
	Sulfur	5.19E-06	2.57E-09	3.57E-06	1.25E-05	5.31E-07	2.32E-07	7.64E-05	2.07E-04	5
Scapegoat W Class I Area	Nitrogen	3.71E-05	4.09E-07	1.65E-04	7.01E-05	5.36E-06	7.77E-07	8.56E-05	1.30E-04	3
	Sulfur	8.05E-06	3.93E-09	5.66E-06	2.68E-05	1.15E-06	2.57E-07	1.22E-04	1.94E-04	5
Teton W Class I Area	Nitrogen	8.10E-05	9.21E-07	3.57E-04	1.66E-04	1.24E-05	1.69E-06	6.17E-05	2.63E-04	3
	Sulfur	1.57E-05	7.98E-09	1.08E-05	5.05E-05	2.02E-06	5.12E-07	9.15E-05	5.10E-04	5
Theodore Roosevelt NP Class I Area	Nitrogen	2.84E-04	3.25E-06	1.40E-03	2.36E-04	2.35E-05	6.69E-06	9.55E-05	8.11E-04	3
	Sulfur	4.78E-05	2.31E-08	3.74E-05	6.87E-05	3.85E-06	1.72E-06	1.53E-04	1.12E-03	5
UL Bend W Class I Area	Nitrogen	2.08E-04	2.36E-06	7.31E-04	6.44E-04	7.77E-05	2.55E-06	1.65E-04	2.83E-04	3
	Sulfur	3.90E-05	1.88E-08	2.46E-05	1.56E-04	1.00E-05	8.68E-07	2.13E-04	3.88E-04	5
Washakie W Class I Area	Nitrogen	1.69E-04	1.96E-06	6.79E-04	4.96E-04	3.39E-05	4.19E-06	1.17E-04	3.91E-04	3
	Sulfur	3.02E-05	1.60E-08	1.85E-05	1.45E-04	5.22E-06	1.09E-06	1.88E-04	7.53E-04	5
Wind Cave NP Class I Area	Nitrogen	2.98E-04	3.38E-06	1.38E-03	1.67E-04	1.73E-05	4.46E-06	6.58E-05	6.50E-04	3
	Sulfur	5.82E-05	2.81E-08	4.30E-05	5.94E-05	3.68E-06	1.55E-06	1.03E-04	1.13E-03	5
Yellowstone NP Class I Area	Nitrogen	1.11E-04	1.25E-06	5.50E-04	1.64E-04	1.28E-05	2.31E-06	1.48E-04	2.69E-04	3
	Sulfur	1.90E-05	9.40E-09	1.51E-05	4.80E-05	2.05E-06	6.87E-07	1.40E-04	4.33E-04	5

Table C-7 Modeled Deposition for Nitrogen and Sulfur - Alternative H Revised- Scenario 1A

Receptor Set	POLLUTANT	Maximum Deposition (kg/ha - yr)								Comparative Deposition Value (kg/ha - yr)
		MT CBNG RFD Construction - ALT H revised	MT CBNG RFD Operation - ALT H revised	MT CBNG RFFA Construction and Operation - ALT H revised	MTOG RFD Construction - ALT H revised	MTOG RFD Operation - ALT H revised	MTOG RFFA Construction and Operation - ALT H revised	All MT Sources - ALT H revised	All Sources - ALT H revised	
CLASS I / CLASS II SENSITIVE LAKES										
Black Joe Lake, Bridger WA	Nitrogen	4.44E-05	5.03E-07	1.98E-04	5.20E-05	3.75E-06	9.09E-07	2.48E-05	3.04E-04	3
	Sulfur	1.17E-05	5.85E-09	8.26E-06	2.21E-05	9.14E-07	4.05E-07	3.88E-05	6.82E-04	5
Deep Lake, Bridger WA	Nitrogen	4.32E-05	4.90E-07	1.93E-04	5.01E-05	3.63E-06	8.90E-07	2.45E-05	3.10E-04	3
	Sulfur	1.15E-05	5.71E-09	8.07E-06	2.14E-05	8.89E-07	3.96E-07	3.79E-05	6.85E-04	5
Emerald Lake, Cloud Peak WA	Nitrogen	5.30E-04	6.00E-06	3.27E-03	3.30E-04	2.79E-05	2.31E-05	1.42E-04	5.11E-04	3
	Sulfur	8.91E-05	4.38E-08	8.55E-05	9.98E-05	4.93E-06	6.41E-06	2.01E-04	7.41E-04	5
Florence, Cloud Peak WA,	Nitrogen	5.41E-04	6.12E-06	3.08E-03	3.25E-04	2.78E-05	2.02E-05	1.37E-04	5.26E-04	3
	Sulfur	9.20E-05	4.51E-08	8.33E-05	9.91E-05	4.99E-06	5.79E-06	1.98E-04	7.68E-04	5
Hobbs Lake, Bridger WA	Nitrogen	3.75E-05	4.21E-07	1.80E-04	3.65E-05	2.89E-06	7.78E-07	2.10E-05	2.79E-04	3
	Sulfur	8.96E-06	4.46E-09	6.63E-06	1.56E-05	7.02E-07	3.19E-07	3.14E-05	5.76E-04	5
Lower Saddlebag, Popo Agie WA	Nitrogen	4.60E-05	5.22E-07	2.02E-04	5.42E-05	3.87E-06	9.38E-07	2.47E-05	3.64E-04	3
	Sulfur	1.22E-05	6.08E-09	8.50E-06	2.25E-05	9.27E-07	4.13E-07	3.84E-05	8.09E-04	5
Ross Lake, Cloud Peak WA	Nitrogen	4.97E-05	5.59E-07	2.34E-04	5.93E-05	4.55E-06	1.04E-06	2.61E-05	2.82E-04	3
	Sulfur	1.09E-05	5.46E-09	7.89E-06	2.29E-05	9.86E-07	3.74E-07	4.35E-05	5.58E-04	5
Upper Frozen Lake, Bridger WA	Nitrogen	4.22E-05	4.78E-07	1.88E-04	4.85E-05	3.52E-06	8.71E-07	2.42E-05	3.25E-04	3
	Sulfur	1.12E-05	5.60E-09	7.91E-06	2.07E-05	8.65E-07	3.87E-07	3.70E-05	7.03E-04	5

Note: Bold type indicate a modeled impact that is above the Comparative Deposition Value

Receptor Set	**POLLUTANT**	*Maximum Deposition (kg/ha - yr)*								**Comparative Deposition Value (kg/ha - yr)**
		MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
CLASS I AREAS										
Badlands NP Class I Area	Nitrogen	2.10E-04	3.05E-06	1.00E-03	1.43E-04	1.54E-05	3.84E-06	5.78E-05	3.77E-04	3
	Sulfur	4.20E-05	3.90E-08	3.24E-05	4.68E-05	2.97E-06	1.23E-06	8.24E-05	5.80E-04	5
Bob Marshall W Class I Area	Nitrogen	1.63E-05	2.30E-07	8.29E-05	2.55E-05	2.06E-06	3.79E-07	3.23E-05	5.62E-05	3
	Sulfur	3.69E-06	3.46E-09	3.06E-06	9.98E-06	4.63E-07	1.32E-07	4.69E-05	8.54E-05	5
Bridger W Class I Area	Nitrogen	4.71E-05	6.77E-07	2.25E-04	5.22E-05	4.07E-06	9.64E-07	2.49E-05	3.60E-04	3
	Sulfur	1.17E-05	1.12E-08	8.24E-06	2.20E-05	9.12E-07	4.04E-07	3.94E-05	7.56E-04	5
Fitzpatrick W Class I Area	Nitrogen	5.63E-05	8.15E-07	2.58E-04	7.60E-05	5.71E-06	1.21E-06	2.98E-05	4.11E-04	3
	Sulfur	1.24E-05	1.20E-08	8.70E-06	2.86E-05	1.20E-06	4.27E-07	5.19E-05	5.94E-04	5
Fort Peck IR Class I Area	Nitrogen	1.93E-04	2.81E-06	7.75E-04	2.45E-04	2.77E-05	3.10E-06	7.84E-05	2.44E-04	3
	Sulfur	3.28E-05	3.04E-08	2.18E-05	7.40E-05	4.54E-06	8.97E-07	1.18E-04	4.63E-04	5
Gates of the Mountain W Class I Area	Nitrogen	5.57E-05	7.96E-07	2.32E-04	1.16E-04	8.70E-06	1.10E-06	2.39E-04	2.96E-04	3
	Sulfur	1.16E-05	1.09E-08	7.58E-06	4.30E-05	1.82E-06	3.41E-07	2.60E-04	3.51E-04	5
Grand Teton NP Class I Area	Nitrogen	4.83E-05	6.94E-07	2.26E-04	5.81E-05	4.48E-06	1.21E-06	5.25E-05	2.06E-04	3
	Sulfur	8.25E-06	7.86E-09	5.84E-06	1.70E-05	7.41E-07	3.01E-07	5.51E-05	5.64E-04	5
North Absaorka W Class I Are	Nitrogen	2.03E-04	3.02E-06	8.01E-04	6.40E-04	4.23E-05	3.35E-06	1.60E-04	4.07E-04	3
	Sulfur	3.69E-05	3.70E-08	2.32E-05	1.86E-04	6.60E-06	1.04E-06	2.31E-04	6.76E-04	5
North Cheyenne IR Class I Area	Nitrogen	2.46E-02	3.72E-04	1.74E+00	1.96E-03	1.38E-04	1.09E-02	5.99E-03	6.55E-03	3
	Sulfur	2.34E-03	2.13E-06	2.36E-02	4.11E-04	1.97E-05	1.57E-03	8.43E-04	1.53E-03	5
Red Rock Lakes Class I Area	Nitrogen	3.12E-05	4.52E-07	1.41E-04	4.75E-05	3.64E-06	9.16E-07	8.17E-05	1.44E-04	3
	Sulfur	5.19E-06	4.94E-09	3.57E-06	1.25E-05	5.31E-07	2.32E-07	7.64E-05	2.07E-04	5
Scapegoat W Class I Area	Nitrogen	3.71E-05	5.26E-07	1.65E-04	7.01E-05	5.36E-06	7.77E-07	8.57E-05	1.30E-04	3
	Sulfur	8.05E-06	7.56E-09	5.66E-06	2.68E-05	1.15E-06	2.57E-07	1.22E-04	1.94E-04	5
Teton W Class I Area	Nitrogen	8.10E-05	1.18E-06	3.57E-04	1.66E-04	1.24E-05	1.69E-06	6.19E-05	2.63E-04	3
	Sulfur	1.57E-05	1.54E-08	1.08E-05	5.05E-05	2.02E-06	5.12E-07	9.15E-05	5.10E-04	5
Theodore Roosevelt NP Class I Area	Nitrogen	2.84E-04	4.17E-06	1.40E-03	2.36E-04	2.35E-05	6.69E-06	9.64E-05	8.12E-04	3
	Sulfur	4.78E-05	4.45E-08	3.74E-05	6.87E-05	3.85E-06	1.72E-06	1.53E-04	1.12E-03	5
UL Bend W Class I Area	Nitrogen	2.08E-04	3.03E-06	7.31E-04	6.44E-04	7.77E-05	2.55E-06	1.66E-04	2.83E-04	3
	Sulfur	3.90E-05	3.62E-08	2.46E-05	1.56E-04	1.00E-05	8.68E-07	2.13E-04	3.88E-04	5
Washakie W Class I Area	Nitrogen	1.69E-04	2.51E-06	6.79E-04	4.96E-04	3.39E-05	4.19E-06	1.18E-04	3.92E-04	3
	Sulfur	3.02E-05	3.07E-08	1.85E-05	1.45E-04	5.22E-06	1.09E-06	1.88E-04	7.53E-04	5
Wind Cave NP Class I Area	Nitrogen	2.98E-04	4.34E-06	1.38E-03	1.67E-04	1.73E-05	4.46E-06	6.68E-05	6.51E-04	3
	Sulfur	5.82E-05	5.41E-08	4.30E-05	5.94E-05	3.68E-06	1.55E-06	1.03E-04	1.13E-03	5
Yellowstone NP Class I Area	Nitrogen	1.11E-04	1.60E-06	5.50E-04	1.64E-04	1.28E-05	2.31E-06	1.48E-04	2.69E-04	3
	Sulfur	1.90E-05	1.81E-08	1.51E-05	4.80E-05	2.05E-06	6.87E-07	1.40E-04	4.33E-04	5

Table C-8 Modeled Deposition for Nitrogen and Sulfur - Alternative H Revised - Scenario 2

Receptor Set	POLLUTANT	*Maximum Deposition (kg/ha - yr)*								Comparative Deposition Value (kg/ha - yr)
		MT CBNG RFD Construction - ALT H revised	*MT CBNG RFD Operation - ALT H revised*	*MT CBNG RFFA Construction and Operation - ALT H revised*	*MTOG RFD Construction - ALT H revised*	*MTOG RFD Operation - ALT H revised*	*MTOG RFFA Construction and Operation - ALT H revised*	*All MT Sources - ALT H revised*	*All Sources - ALT H revised*	
CLASS I / CLASS II SENSITIVE LAKES										
Black Joe Lake, Bridger WA	Nitrogen	4.44E-05	6.46E-07	1.98E-04	5.20E-05	3.75E-06	9.09E-07	2.50E-05	3.04E-04	3
	Sulfur	1.17E-05	1.13E-08	8.26E-06	2.21E-05	9.14E-07	4.05E-07	3.89E-05	6.82E-04	5
Deep Lake, Bridger WA	Nitrogen	4.32E-05	6.29E-07	1.93E-04	5.01E-05	3.63E-06	8.90E-07	2.46E-05	3.10E-04	3
	Sulfur	1.15E-05	1.10E-08	8.07E-06	2.14E-05	8.89E-07	3.96E-07	3.80E-05	6.85E-04	5
Emerald Lake, Cloud Peak WA	Nitrogen	5.30E-04	7.69E-06	3.27E-03	3.30E-04	2.79E-05	2.31E-05	1.44E-04	5.13E-04	3
	Sulfur	8.91E-05	8.42E-08	8.55E-05	9.98E-05	4.93E-06	6.41E-06	2.01E-04	7.41E-04	5
Florence, Cloud Peak WA,	Nitrogen	5.41E-04	7.85E-06	3.08E-03	3.25E-04	2.78E-05	2.02E-05	1.39E-04	5.28E-04	3
	Sulfur	9.20E-05	8.67E-08	8.33E-05	9.91E-05	4.99E-06	5.79E-06	1.98E-04	7.68E-04	5
Hobbs Lake, Bridger WA	Nitrogen	3.75E-05	5.41E-07	1.80E-04	3.65E-05	2.89E-06	7.78E-07	2.11E-05	2.79E-04	3
	Sulfur	8.96E-06	8.57E-09	6.63E-06	1.56E-05	7.02E-07	3.19E-07	3.14E-05	5.76E-04	5
Lower Saddlebag, Popo Agie WA	Nitrogen	4.60E-05	6.70E-07	2.02E-04	5.42E-05	3.87E-06	9.38E-07	2.48E-05	3.65E-04	3
	Sulfur	1.22E-05	1.17E-08	8.50E-06	2.25E-05	9.27E-07	4.13E-07	3.84E-05	8.09E-04	5
Ross Lake, Cloud Peak WA	Nitrogen	4.97E-05	7.17E-07	2.34E-04	5.93E-05	4.55E-06	1.04E-06	2.63E-05	2.83E-04	3
	Sulfur	1.09E-05	1.05E-08	7.89E-06	2.29E-05	9.86E-07	3.74E-07	4.35E-05	5.58E-04	5
Upper Frozen Lake, Bridger WA	Nitrogen	4.22E-05	6.13E-07	1.88E-04	4.85E-05	3.52E-06	8.71E-07	2.43E-05	3.25E-04	3
	Sulfur	1.12E-05	1.08E-08	7.91E-06	2.07E-05	8.65E-07	3.87E-07	3.70E-05	7.03E-04	5

Table C-9 Visibility - Method 2 EPA f(RH) values, 95% RHMAX FLAG Background - Alternative H Revised

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.52	n/a	0	0	4.60	n/a	0	0	2.63	n/a	0	0	0.37	n/a
Bob Marshall W Class I	0	0	0.16	n/a	0	0	1.35	n/a	0	0	0.89	n/a	0	0	0.22	n/a
Bridger W Class I	0	0	1.59	n/a	5	2	13.83	n/a	2	1	11.39	n/a	0	0	0.91	n/a
Fitzpatrick W Class I	0	0	1.63	n/a	4	1	14.21	n/a	1	1	11.74	n/a	0	0	1.01	n/a
Fort Peck IR Class I	0	0	1.00	n/a	2	0	8.68	n/a	0	0	4.39	n/a	0	0	1.69	n/a
Gates of the Mountain W Class I	0	0	0.25	n/a	0	0	2.07	n/a	0	0	1.16	n/a	0	0	0.55	n/a
Grand Teton NP Class I	0	0	0.54	n/a	0	0	4.59	n/a	0	0	2.91	n/a	0	0	0.33	n/a
North Absaorka W Class I	0	0	1.89	n/a	8	2	16.29	n/a	3	1	11.10	n/a	0	0	3.24	n/a
North Cheyenne IR Class I	3	0	6.03	n/a	132	58	51.09	n/a	326	229	118.45	n/a	0	0	1.41	n/a
Red Rock Lakes Class I	0	0	0.27	n/a	0	0	2.26	n/a	0	0	1.07	n/a	0	0	0.26	n/a
Scapegoat W Class I	0	0	0.25	n/a	0	0	2.14	n/a	0	0	1.29	n/a	0	0	0.46	n/a
Teton W Class I	0	0	0.76	n/a	2	0	6.49	n/a	0	0	4.56	n/a	0	0	1.27	n/a
Theodore Roosevelt NP Class I	0	0	0.93	n/a	5	0	8.04	n/a	1	0	5.38	n/a	0	0	1.01	n/a
UL Bend W Class I	0	0	0.68	n/a	1	0	5.51	n/a	0	0	2.73	n/a	0	0	0.94	n/a
Washakie W Class I	0	0	1.40	n/a	8	1	12.15	n/a	3	0	5.10	n/a	0	0	4.18	n/a
Wind Cave NP Class I	0	0	0.96	n/a	3	0	8.35	n/a	0	0	4.08	n/a	0	0	0.55	n/a
Yellowstone NP Class I	0	0	1.79	n/a	3	1	15.39	n/a	1	1	10.05	n/a	0	0	0.92	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	4.11	n/a	7	3	35.83	n/a	2	1	27.33	n/a	0	0	2.84	n/a
Agate Fossil Beds NM Class II	0	0	0.42	n/a	0	0	3.60	n/a	0	0	1.99	n/a	0	0	0.19	n/a
Big Horn Canyon NRA Class II	1	0	5.28	n/a	34	14	47.00	n/a	30	14	35.58	n/a	0	0	1.43	n/a
Black Elk W Class II	0	0	1.09	n/a	3	0	9.51	n/a	0	0	4.47	n/a	0	0	0.58	n/a
Cloud Peak Class II	2	1	11.95	n/a	26	9	103.86	n/a	18	8	63.80	n/a	0	0	2.75	n/a
Crow IR Class II	89	23	39.49	n/a	260	172	107.04	n/a	325	245	142.01	n/a	0	0	4.79	n/a
Devils Tower NM Class II	0	0	0.99	n/a	8	0	8.20	n/a	2	0	5.54	n/a	0	0	0.42	n/a
Fort Belknap IR Class II	0	0	0.83	n/a	1	0	6.98	n/a	0	0	3.38	n/a	0	0	0.86	n/a
Fort Laramie NHS Class II	0	0	0.84	n/a	1	0	7.24	n/a	0	0	3.27	n/a	0	0	0.36	n/a
Jedediah Smith W Class II	0	0	0.43	n/a	0	0	3.67	n/a	0	0	1.88	n/a	0	0	0.28	n/a
Jewel Cave NM Class II	0	0	1.28	n/a	3	1	11.14	n/a	1	0	5.27	n/a	0	0	0.68	n/a
Lee Metcalf W Class II	0	0	0.65	n/a	1	0	5.43	n/a	0	0	2.80	n/a	0	0	0.97	n/a
Mt Naomi W Class II	0	0	0.21	n/a	0	0	1.78	n/a	0	0	1.19	n/a	0	0	0.08	n/a
Mt Rushmore Class II	0	0	0.97	n/a	3	0	8.42	n/a	0	0	3.98	n/a	0	0	0.53	n/a
Popo Agie W Class II	0	0	1.30	n/a	5	2	11.03	n/a	2	0	8.75	n/a	0	0	0.87	n/a
Soldier Creek WA Class II	0	0	0.44	n/a	0	0	3.79	n/a	0	0	2.41	n/a	0	0	0.37	n/a
Wellsville Mountain W Class II	0	0	0.19	n/a	0	0	1.60	n/a	0	0	1.03	n/a	0	0	0.07	n/a
Wind River IR Class II	0	0	1.87	n/a	9	6	16.29	n/a	5	1	12.27	n/a	0	0	2.01	n/a
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	2	0	6.03	n/a	129	55	51.09	n/a	281	157	86.85	n/a	0	0	1.23	n/a
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	17	0	8.34	n/a	195	107	71.03	n/a	304	193	142.01	n/a	0	0	4.79	n/a

Table C-9 Visibility - Method 2 EPA f(RH) values, 95% RHMAX FLAG Background - Alternative H Revised

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.02	n/a	0	0	0.02	n/a	92	41	55.04	n/a	263	194	379.36	n/a
Bob Marshall W Class I	0	0	0.01	n/a	0	0	0.00	n/a	35	26	72.87	n/a	44	29	76.30	n/a
Bridger W Class I	0	0	0.05	n/a	0	0	0.03	n/a	44	31	113.49	n/a	207	146	876.90	n/a
Fitzpatrick W Class I	0	0	0.05	n/a	0	0	0.04	n/a	47	27	124.60	n/a	155	105	534.88	n/a
Fort Peck IR Class I	0	0	0.05	n/a	0	0	0.02	n/a	109	58	64.39	n/a	165	111	366.54	n/a
Gates of the Mountain W Class I	0	0	0.02	n/a	0	0	0.00	n/a	83	51	127.00	n/a	92	61	127.58	n/a
Grand Teton NP Class I	0	0	0.02	n/a	0	0	0.01	n/a	56	29	48.47	n/a	171	101	226.10	n/a
North Absaorka W Class I	0	0	0.17	n/a	0	0	0.04	n/a	115	59	118.32	n/a	168	105	438.44	n/a
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	361	315	186.00	n/a	364	332	492.80	n/a
Red Rock Lakes Class I	0	0	0.01	n/a	0	0	0.00	n/a	53	30	36.88	n/a	93	50	83.49	n/a
Scapegoat W Class I	0	0	0.02	n/a	0	0	0.00	n/a	57	42	189.59	n/a	67	49	201.99	n/a
Teton W Class I	0	0	0.07	n/a	0	0	0.02	n/a	66	34	139.29	n/a	169	113	437.89	n/a
Theodore Roosevelt NP Class I	0	0	0.05	n/a	0	0	0.01	n/a	99	51	80.66	n/a	217	150	483.54	n/a
UL Bend W Class I	0	0	0.05	n/a	0	0	0.01	n/a	143	69	58.47	n/a	175	98	155.14	n/a
Washakie W Class I	0	0	0.24	n/a	0	0	0.03	n/a	101	57	157.94	n/a	179	120	667.94	n/a
Wind Cave NP Class I	0	0	0.03	n/a	0	0	0.01	n/a	102	53	44.24	n/a	305	218	502.78	n/a
Yellowstone NP Class I	0	0	0.06	n/a	0	0	0.04	n/a	120	66	90.65	n/a	196	118	413.82	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.18	n/a	0	0	0.08	n/a	184	107	204.63	n/a	215	140	536.58	n/a
Agate Fossil Beds NM Class II	0	0	0.01	n/a	0	0	0.01	n/a	65	26	29.38	n/a	270	201	319.20	n/a
Big Horn Canyon NRA Class II	0	0	0.06	n/a	0	0	1.55	n/a	249	206	1712.31	n/a	357	313	1722.45	n/a
Black Elk W Class II	0	0	0.03	n/a	0	0	0.01	n/a	87	46	42.45	n/a	288	186	502.19	n/a
Cloud Peak Class II	0	0	0.08	n/a	0	0	0.09	n/a	132	86	245.39	n/a	219	155	425.45	n/a
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.35	n/a	365	365	1079.42	n/a
Devils Tower NM Class II	0	0	0.04	n/a	0	0	0.03	n/a	126	62	60.43	n/a	316	235	381.66	n/a
Fort Belknap IR Class II	0	0	0.05	n/a	0	0	0.01	n/a	150	73	64.16	n/a	179	105	201.53	n/a
Fort Laramie NHS Class II	0	0	0.03	n/a	0	0	0.01	n/a	59	25	38.31	n/a	273	208	445.30	n/a
Jedediah Smith W Class II	0	0	0.02	n/a	0	0	0.01	n/a	53	29	47.14	n/a	165	102	218.58	n/a
Jewel Cave NM Class II	0	0	0.04	n/a	0	0	0.02	n/a	93	50	52.11	n/a	301	212	548.31	n/a
Lee Metcalf W Class II	0	0	0.02	n/a	0	0	0.01	n/a	162	115	172.19	n/a	190	136	185.44	n/a
Mt Naomi W Class II	0	0	0.00	n/a	0	0	0.00	n/a	4	1	22.89	n/a	77	49	260.37	n/a
Mt Rushmore Class II	0	0	0.03	n/a	0	0	0.01	n/a	85	45	39.94	n/a	276	183	484.33	n/a
Popo Agie W Class II	0	0	0.05	n/a	0	0	0.03	n/a	43	32	81.26	n/a	189	121	967.11	n/a
Soldier Creek WA Class II	0	0	0.02	n/a	0	0	0.02	n/a	89	37	49.56	n/a	281	216	327.13	n/a
Wellsville Mountain W Class II	0	0	0.00	n/a	0	0	0.00	n/a	2	1	15.36	n/a	67	38	192.95	n/a
Wind River IR Class II	0	0	0.10	n/a	0	0	0.04	n/a	121	67	170.96	n/a	292	233	1155.18	n/a
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	357	279	186.00	n/a	363	314	467.69	n/a
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.35	n/a	365	365	1079.42	n/a

Table C-10 Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.4	0.3	0	0	3.7	2.5	0	0	2.4	1.3	0	0	0.3	0.2
Bob Marshall W Class I	0	0	0.1	0.0	0	0	0.9	0.3	0	0	0.6	0.1	0	0	0.2	0.1
Bridger W Class I	0	0	0.6	0.2	1	0	5.1	1.7	0	0	3.9	0.9	0	0	0.5	0.3
Fitzpatrick W Class I	0	0	0.6	0.2	0	0	4.9	1.7	0	0	4.0	0.6	0	0	0.6	0.3
Fort Peck IR Class I	0	0	0.7	0.3	1	0	6.2	2.4	0	0	3.0	1.2	0	0	1.3	0.4
Gates of the Mountain W Class I	0	0	0.3	0.1	0	0	2.5	0.6	0	0	1.3	0.4	0	0	0.7	0.2
Grand Teton NP Class I	0	0	0.4	0.1	0	0	2.9	0.8	0	0	1.8	0.5	0	0	0.2	0.1
North Absaorka W Class I	0	0	1.1	0.4	4	0	9.1	3.4	2	0	6.2	1.9	0	0	2.1	0.8
North Cheyenne IR Class I	1	0	5.0	2.7	101	24	22.1	17.1	326	220	107.3	56.0	0	0	0.8	0.6
Red Rock Lakes Class I	0	0	0.3	0.1	0	0	2.5	0.5	0	0	1.2	0.2	0	0	0.3	0.1
Scapegoat W Class I	0	0	0.2	0.1	0	0	1.5	0.4	0	0	0.9	0.2	0	0	0.4	0.1
Teton W Class I	0	0	0.5	0.1	0	0	4.3	1.3	0	0	2.8	0.6	0	0	1.6	0.2
Theodore Roosevelt NP Class I	0	0	0.9	0.5	3	0	7.7	3.9	1	0	6.2	2.7	0	0	1.1	0.3
UL Bend W Class I	0	0	0.8	0.2	1	0	6.8	2.0	0	0	3.4	0.7	0	0	0.9	0.5
Washakie W Class I	0	0	0.8	0.4	3	0	6.5	3.5	0	0	4.1	1.6	0	0	2.8	0.8
Wind Cave NP Class I	0	0	0.7	0.4	1	0	5.7	3.1	0	0	2.7	1.6	0	0	0.3	0.2
Yellowstone NP Class I	0	0	1.0	0.2	1	0	8.6	1.5	1	0	5.6	1.0	0	0	0.9	0.3
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	2.4	0.5	7	1	20.6	4.2	2	1	15.2	2.1	0	0	2.2	0.9
Agate Fossil Beds NM Class II	0	0	0.4	0.2	0	0	3.4	1.5	0	0	1.7	0.9	0	0	0.3	0.1
Big Horn Canyon NRA Class II	0	0	2.8	1.2	24	8	23.1	10.1	27	7	24.6	9.8	0	0	0.8	0.5
Black Elk W Class II	0	0	0.7	0.4	1	0	5.9	3.1	0	0	2.7	1.5	0	0	0.3	0.2
Cloud Peak Class II	1	0	5.4	0.8	14	5	44.3	6.7	10	4	28.5	5.4	0	0	1.2	0.3
Crow IR Class II	79	22	38.5	19.9	245	161	99.2	53.2	323	229	92.2	59.3	0	0	4.7	1.8
Devils Tower NM Class II	0	0	1.1	0.5	6	0	9.0	4.2	1	0	5.6	1.9	0	0	0.4	0.3
Fort Belknap IR Class II	0	0	0.7	0.1	1	0	5.6	1.1	0	0	2.8	0.5	0	0	0.7	0.4
Fort Laramie NHS Class II	0	0	0.4	0.2	0	0	3.6	1.8	0	0	1.6	1.0	0	0	0.3	0.2
Jedediah Smith W Class II	0	0	0.3	0.1	0	0	2.4	0.7	0	0	1.2	0.4	0	0	0.2	0.1
Jewel Cave NM Class II	0	0	0.7	0.3	3	0	6.2	2.4	0	0	2.9	1.4	0	0	0.3	0.1
Lee Metcalf W Class II	0	0	0.6	0.1	1	0	5.3	1.0	0	0	2.7	0.5	0	0	0.7	0.2
Mt Naomi W Class II	0	0	0.2	0.0	0	0	1.6	0.3	0	0	1.0	0.1	0	0	0.1	0.0
Mt Rushmore Class II	0	0	0.7	0.3	1	0	5.7	2.9	0	0	2.6	1.5	0	0	0.3	0.2
Popo Agie W Class II	0	0	0.7	0.2	2	0	5.6	2.1	0	0	4.3	1.1	0	0	0.4	0.2
Soldier Creek WA Class II	0	0	0.5	0.2	0	0	4.1	2.0	0	0	2.2	1.2	0	0	0.3	0.1
Wellsville Mountain W Class II	0	0	0.2	0.0	0	0	1.5	0.2	0	0	0.9	0.1	0	0	0.1	0.0
Wind River IR Class II	0	0	1.0	0.5	6	0	8.2	4.1	0	0	4.4	2.1	0	0	1.2	0.6
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	97	24	21.9	17.1	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	173	82	36.7	27.7	299	165	60.4	37.1	0	0	4.7	1.8

Table C-10 Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	88	34	34.4	19.0	283	218	230.0	124.8
Bob Marshall W Class I	0	0	0.0	0.0	0	0	0.0	0.0	35	23	57.9	32.2	46	28	59.5	42.1
Bridger W Class I	0	0	0.0	0.0	0	0	0.0	0.0	42	22	54.8	23.3	225	146	453.5	151.7
Fitzpatrick W Class I	0	0	0.0	0.0	0	0	0.0	0.0	42	19	63.0	30.3	157	109	315.3	128.7
Fort Peck IR Class I	0	0	0.0	0.0	0	0	0.0	0.0	94	45	33.8	24.6	153	90	169.1	80.6
Gates of the Mountain W Class I	0	0	0.0	0.0	0	0	0.0	0.0	88	58	93.6	56.3	103	69	117.6	91.1
Grand Teton NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	46	26	31.5	17.8	165	92	181.5	76.2
North Absaorka W Class I	0	0	0.1	0.1	0	0	0.0	0.0	104	49	83.6	51.7	160	90	252.7	127.1
North Cheyenne IR Class I	0	0	0.1	0.1	0	0	0.5	0.3	362	315	140.7	83.0	365	337	339.2	156.7
Red Rock Lakes Class I	0	0	0.0	0.0	0	0	0.0	0.0	53	24	42.4	19.3	99	50	93.2	52.7
Scapegoat W Class I	0	0	0.0	0.0	0	0	0.0	0.0	59	38	112.6	46.0	68	48	112.7	67.2
Teton W Class I	0	0	0.1	0.0	0	0	0.0	0.0	64	24	77.9	30.6	154	92	265.1	119.0
Theodore Roosevelt NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	116	57	77.1	32.7	232	171	355.8	136.3
UL Bend W Class I	0	0	0.1	0.0	0	0	0.0	0.0	141	64	56.7	31.5	176	98	152.5	59.6
Washakie W Class I	0	0	0.2	0.1	0	0	0.0	0.0	94	48	99.9	59.0	177	115	364.3	152.4
Wind Cave NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	104	49	32.5	22.8	325	261	273.9	147.2
Yellowstone NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	115	53	84.0	37.5	193	105	224.9	96.7
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.1	0.0	0	0	0.1	0.0	182	112	173.6	60.0	213	136	304.5	125.3
Agate Fossil Beds NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	77	24	29.8	18.0	297	237	398.1	132.8
Big Horn Canyon NRA Class II	0	0	0.1	0.0	0	0	1.2	0.5	254	209	1686.5	624.6	357	313	1694.5	639.3
Black Elk W Class II	0	0	0.0	0.0	0	0	0.0	0.0	96	44	33.8	21.8	317	234	268.3	149.7
Cloud Peak Class II	0	0	0.0	0.0	0	0	0.1	0.0	123	70	109.8	34.2	216	145	238.6	172.1
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	651.9	365	365	1003.4	666.9
Devils Tower NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	126	66	44.6	26.5	326	278	276.9	134.3
Fort Belknap IR Class II	0	0	0.0	0.0	0	0	0.0	0.0	141	66	53.1	37.2	173	92	142.2	54.0
Fort Laramie NHS Class II	0	0	0.0	0.0	0	0	0.0	0.0	73	23	30.3	17.7	296	249	535.7	149.3
Jedediah Smith W Class II	0	0	0.0	0.0	0	0	0.0	0.0	49	26	31.6	14.7	168	96	173.3	66.1
Jewel Cave NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	102	48	35.0	24.8	319	253	291.3	141.3
Lee Metcalf W Class II	0	0	0.0	0.0	0	0	0.0	0.0	147	96	117.5	41.5	175	113	151.4	61.0
Mt Naomi W Class II	0	0	0.0	0.0	0	0	0.0	0.0	6	1	17.3	3.3	80	52	197.7	70.0
Mt Rushmore Class II	0	0	0.0	0.0	0	0	0.0	0.0	92	41	32.6	22.1	311	220	260.3	146.6
Popo Agie W Class II	0	0	0.0	0.0	0	0	0.0	0.0	40	23	55.8	22.7	211	137	499.4	163.4
Soldier Creek WA Class II	0	0	0.0	0.0	0	0	0.0	0.0	83	34	31.5	19.8	299	245	394.5	125.5
Wellsville Mountain W Class II	0	0	0.0	0.0	0	0	0.0	0.0	2	1	12.4	2.6	64	40	161.1	56.4
Wind River IR Class II	0	0	0.1	0.0	0	0	0.0	0.0	110	56	97.2	55.7	310	243	563.0	214.0
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	356	271	140.7	68.5	364	316	339.2	156.1
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	651.9	365	365	1003.4	666.9

Table C-11 Visibility - Method 2.EPA f(RH) values, 95% RHMAX FLAG Background - Alternative H Revised- Scenario 1

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.52	n/a	0	0	3.6	n/a	0	0	2.63	n/a	0	0	0.37	n/a
Bob Marshall W Class I	0	0	0.16	n/a	0	0	1.1	n/a	0	0	0.89	n/a	0	0	0.22	n/a
Bridger W Class I	0	0	1.59	n/a	4	1	10.8	n/a	2	1	11.39	n/a	0	0	0.91	n/a
Fitzpatrick W Class I	0	0	1.63	n/a	2	1	11.1	n/a	1	1	11.74	n/a	0	0	1.01	n/a
Fort Peck IR Class I	0	0	1.00	n/a	1	0	6.8	n/a	0	0	4.39	n/a	0	0	1.69	n/a
Gates of the Mountain W Class I	0	0	0.25	n/a	0	0	1.6	n/a	0	0	1.16	n/a	0	0	0.55	n/a
Grand Teton NP Class I	0	0	0.54	n/a	0	0	3.6	n/a	0	0	2.91	n/a	0	0	0.33	n/a
North Absaorka W Class I	0	0	1.89	n/a	5	1	12.8	n/a	3	1	11.10	n/a	0	0	3.24	n/a
North Cheyenne IR Class I	3	0	6.03	n/a	109	37	40.1	n/a	326	229	118.45	n/a	0	0	1.41	n/a
Red Rock Lakes Class I	0	0	0.27	n/a	0	0	1.8	n/a	0	0	1.07	n/a	0	0	0.26	n/a
Scapegoat W Class I	0	0	0.25	n/a	0	0	1.7	n/a	0	0	1.29	n/a	0	0	0.46	n/a
Teton W Class I	0	0	0.76	n/a	1	0	5.1	n/a	0	0	4.56	n/a	0	0	1.27	n/a
Theodore Roosevelt NP Class I	0	0	0.93	n/a	3	0	6.3	n/a	1	0	5.38	n/a	0	0	1.01	n/a
UL Bend W Class I	0	0	0.68	n/a	0	0	4.3	n/a	0	0	2.73	n/a	0	0	0.94	n/a
Washakie W Class I	0	0	1.40	n/a	6	0	9.5	n/a	3	0	5.10	n/a	0	0	4.18	n/a
Wind Cave NP Class I	0	0	0.96	n/a	1	0	6.5	n/a	0	0	4.08	n/a	0	0	0.55	n/a
Yellowstone NP Class I	0	0	1.79	n/a	1	1	12.0	n/a	1	1	10.05	n/a	0	0	0.92	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	4.11	n/a	7	1	28.0	n/a	2	1	27.33	n/a	0	0	2.84	n/a
Agate Fossil Beds NM Class II	0	0	0.42	n/a	0	0	2.8	n/a	0	0	1.99	n/a	0	0	0.19	n/a
Big Horn Canyon NRA Class II	1	0	5.28	n/a	23	11	36.7	n/a	30	14	35.58	n/a	0	0	1.43	n/a
Black Elk W Class II	0	0	1.09	n/a	1	0	7.4	n/a	0	0	4.47	n/a	0	0	0.58	n/a
Cloud Peak Class II	2	1	11.95	n/a	18	6	81.2	n/a	18	8	63.80	n/a	0	0	2.75	n/a
Crow IR Class II	89	23	39.49	n/a	239	155	96.5	n/a	325	245	142.01	n/a	0	0	4.79	n/a
Devils Tower NM Class II	0	0	0.99	n/a	4	0	6.5	n/a	2	0	5.54	n/a	0	0	0.42	n/a
Fort Belknap IR Class II	0	0	0.83	n/a	1	0	5.5	n/a	0	0	3.38	n/a	0	0	0.86	n/a
Fort Laramie NHS Class II	0	0	0.84	n/a	1	0	5.7	n/a	0	0	3.27	n/a	0	0	0.36	n/a
Jedediah Smith W Class II	0	0	0.43	n/a	0	0	2.9	n/a	0	0	1.88	n/a	0	0	0.28	n/a
Jewel Cave NM Class II	0	0	1.28	n/a	2	0	8.7	n/a	1	0	5.27	n/a	0	0	0.68	n/a
Lee Metcalf W Class II	0	0	0.65	n/a	0	0	4.3	n/a	0	0	2.80	n/a	0	0	0.97	n/a
Mt Naomi W Class II	0	0	0.21	n/a	0	0	1.4	n/a	0	0	1.19	n/a	0	0	0.08	n/a
Mt Rushmore Class II	0	0	0.97	n/a	1	0	6.6	n/a	0	0	3.98	n/a	0	0	0.53	n/a
Popo Agie W Class II	0	0	1.30	n/a	4	0	8.6	n/a	2	0	8.75	n/a	0	0	0.87	n/a
Soldier Creek WA Class II	0	0	0.44	n/a	0	0	3.0	n/a	0	0	2.41	n/a	0	0	0.37	n/a
Wellsville Mountain W Class II	0	0	0.19	n/a	0	0	1.3	n/a	0	0	1.03	n/a	0	0	0.07	n/a
Wind River IR Class II	0	0	1.87	n/a	8	4	12.7	n/a	5	1	12.27	n/a	0	0	2.01	n/a
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	2	0	6.03	n/a	108	35	40.11	n/a	281	157	86.85	n/a	0	0	1.23	n/a
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	17	0	8.34	n/a	169	87	55.59	n/a	304	193	142.01	n/a	0	0	4.79	n/a

Table C-11 Visibility - Method 2.EPA f(RH) values, 95% RHMAX FLAG Background - Alternative H Revised- Scenario 1

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.02	n/a	0	0	0.02	n/a	90	40	54.2	n/a	263	194	379.1	n/a
Bob Marshall W Class I	0	0	0.01	n/a	0	0	0.00	n/a	34	26	72.9	n/a	44	29	76.0	n/a
Bridger W Class I	0	0	0.05	n/a	0	0	0.03	n/a	44	31	110.7	n/a	207	146	874.7	n/a
Fitzpatrick W Class I	0	0	0.05	n/a	0	0	0.04	n/a	47	27	121.7	n/a	155	104	533.9	n/a
Fort Peck IR Class I	0	0	0.05	n/a	0	0	0.02	n/a	107	58	63.5	n/a	165	110	366.4	n/a
Gates of the Mountain W Class I	0	0	0.02	n/a	0	0	0.00	n/a	83	51	127.0	n/a	92	61	127.6	n/a
Grand Teton NP Class I	0	0	0.02	n/a	0	0	0.01	n/a	54	29	47.5	n/a	171	101	225.9	n/a
North Absaorka W Class I	0	0	0.17	n/a	0	0	0.04	n/a	115	59	116.5	n/a	168	105	435.2	n/a
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	361	313	177.6	n/a	364	332	487.1	n/a
Red Rock Lakes Class I	0	0	0.01	n/a	0	0	0.00	n/a	53	30	36.8	n/a	93	50	83.0	n/a
Scapegoat W Class I	0	0	0.02	n/a	0	0	0.00	n/a	57	42	189.6	n/a	67	49	202.0	n/a
Teton W Class I	0	0	0.07	n/a	0	0	0.02	n/a	66	34	137.9	n/a	169	113	436.5	n/a
Theodore Roosevelt NP Class I	0	0	0.05	n/a	0	0	0.01	n/a	97	50	78.9	n/a	217	150	482.3	n/a
UL Bend W Class I	0	0	0.05	n/a	0	0	0.01	n/a	143	69	58.2	n/a	174	98	155.1	n/a
Washakie W Class I	0	0	0.24	n/a	0	0	0.03	n/a	101	57	155.5	n/a	179	120	665.3	n/a
Wind Cave NP Class I	0	0	0.03	n/a	0	0	0.01	n/a	101	52	42.5	n/a	304	218	502.1	n/a
Yellowstone NP Class I	0	0	0.06	n/a	0	0	0.04	n/a	120	66	87.8	n/a	196	118	410.5	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.18	n/a	0	0	0.08	n/a	184	107	204.1	n/a	215	140	528.8	n/a
Agate Fossil Beds NM Class II	0	0	0.01	n/a	0	0	0.01	n/a	64	26	29.0	n/a	269	201	319.2	n/a
Big Horn Canyon NRA Class II	0	0	0.06	n/a	0	0	1.55	n/a	249	206	1712.1	n/a	357	313	1722.2	n/a
Black Elk W Class II	0	0	0.03	n/a	0	0	0.01	n/a	85	45	41.9	n/a	288	186	501.4	n/a
Cloud Peak Class II	0	0	0.08	n/a	0	0	0.09	n/a	131	84	222.8	n/a	219	154	410.1	n/a
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.3	n/a	365	365	1079.4	n/a
Devils Tower NM Class II	0	0	0.04	n/a	0	0	0.03	n/a	125	58	59.7	n/a	316	232	380.9	n/a
Fort Belknap IR Class II	0	0	0.05	n/a	0	0	0.01	n/a	149	73	63.7	n/a	179	105	201.4	n/a
Fort Laramie NHS Class II	0	0	0.03	n/a	0	0	0.01	n/a	58	23	36.7	n/a	273	208	444.8	n/a
Jedediah Smith W Class II	0	0	0.02	n/a	0	0	0.01	n/a	53	28	47.1	n/a	165	102	218.4	n/a
Jewel Cave NM Class II	0	0	0.04	n/a	0	0	0.02	n/a	93	49	51.4	n/a	300	212	547.4	n/a
Lee Metcalf W Class II	0	0	0.02	n/a	0	0	0.01	n/a	161	115	172.2	n/a	190	136	185.4	n/a
Mt Naomi W Class II	0	0	0.00	n/a	0	0	0.00	n/a	4	1	22.5	n/a	77	49	260.3	n/a
Mt Rushmore Class II	0	0	0.03	n/a	0	0	0.01	n/a	85	45	39.5	n/a	275	183	483.6	n/a
Popo Agie W Class II	0	0	0.05	n/a	0	0	0.03	n/a	43	32	79.0	n/a	189	121	964.7	n/a
Soldier Creek WA Class II	0	0	0.02	n/a	0	0	0.02	n/a	88	37	48.9	n/a	280	216	326.4	n/a
Wellsville Mountain W Class II	0	0	0.00	n/a	0	0	0.00	n/a	1	1	15.0	n/a	67	38	192.9	n/a
Wind River IR Class II	0	0	0.10	n/a	0	0	0.04	n/a	120	66	169.5	n/a	292	233	1152.7	n/a
CLASS I AREAS - Receptors wi																
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	357	276	177.59	n/a	363	314	461.64	n/a
SENSITIVE CLASS II AREAS - F																
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.34	n/a	365	365	1079.41	n/a

Table C-12 Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised- Scenario 1

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.4	0.3	0	0	2.9	2.0	0	0	2.4	1.3	0	0	0.3	0.2
Bob Marshall W Class I	0	0	0.1	0.0	0	0	0.7	0.2	0	0	0.6	0.1	0	0	0.2	0.1
Bridger W Class I	0	0	0.6	0.2	0	0	4.0	1.3	0	0	3.9	0.9	0	0	0.5	0.3
Fitzpatrick W Class I	0	0	0.6	0.2	0	0	3.9	1.3	0	0	4.0	0.6	0	0	0.6	0.3
Fort Peck IR Class I	0	0	0.7	0.3	0	0	4.9	1.8	0	0	3.0	1.2	0	0	1.3	0.4
Gates of the Mountain W Class I	0	0	0.3	0.1	0	0	2.0	0.5	0	0	1.3	0.4	0	0	0.7	0.2
Grand Teton NP Class I	0	0	0.4	0.1	0	0	2.3	0.7	0	0	1.8	0.5	0	0	0.2	0.1
North Absaorka W Class I	0	0	1.1	0.4	3	0	7.1	2.7	2	0	6.2	1.9	0	0	2.1	0.8
North Cheyenne IR Class I	1	0	5.0	2.7	71	19	18.6	13.9	326	220	107.3	56.0	0	0	0.8	0.6
Red Rock Lakes Class I	0	0	0.3	0.1	0	0	2.0	0.4	0	0	1.2	0.2	0	0	0.3	0.1
Scapegoat W Class I	0	0	0.2	0.1	0	0	1.2	0.3	0	0	0.9	0.2	0	0	0.4	0.1
Teton W Class I	0	0	0.5	0.1	0	0	3.4	1.0	0	0	2.8	0.6	0	0	1.6	0.2
Theodore Roosevelt NP Class I	0	0	0.9	0.5	2	0	6.0	3.1	1	0	6.2	2.7	0	0	1.1	0.3
UL Bend W Class I	0	0	0.8	0.2	1	0	5.4	1.6	0	0	3.4	0.7	0	0	0.9	0.5
Washakie W Class I	0	0	0.8	0.4	2	0	5.1	2.7	0	0	4.1	1.6	0	0	2.8	0.8
Wind Cave NP Class I	0	0	0.7	0.4	0	0	4.4	2.4	0	0	2.7	1.6	0	0	0.3	0.2
Yellowstone NP Class I	0	0	1.0	0.2	1	0	6.7	1.2	1	0	5.6	1.0	0	0	0.9	0.3
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	2.4	0.5	4	1	16.2	3.3	2	1	15.2	2.1	0	0	2.2	0.9
Agate Fossil Beds NM Class II	0	0	0.4	0.2	0	0	2.7	1.2	0	0	1.7	0.9	0	0	0.3	0.1
Big Horn Canyon NRA Class II	0	0	2.8	1.2	20	4	18.2	7.9	27	7	24.6	9.8	0	0	0.8	0.5
Black Elk W Class II	0	0	0.7	0.4	0	0	4.6	2.4	0	0	2.7	1.5	0	0	0.3	0.2
Cloud Peak Class II	1	0	5.4	0.8	9	4	34.8	5.3	10	4	28.5	5.4	0	0	1.2	0.3
Crow IR Class II	79	22	38.5	19.9	226	140	94.6	50.7	323	229	92.2	59.3	0	0	4.7	1.8
Devils Tower NM Class II	0	0	1.1	0.5	2	0	7.1	3.3	1	0	5.6	1.9	0	0	0.4	0.3
Fort Belknap IR Class II	0	0	0.7	0.1	0	0	4.4	0.9	0	0	2.8	0.5	0	0	0.7	0.4
Fort Laramie NHS Class II	0	0	0.4	0.2	0	0	2.8	1.4	0	0	1.6	1.0	0	0	0.3	0.2
Jedediah Smith W Class II	0	0	0.3	0.1	0	0	1.9	0.6	0	0	1.2	0.4	0	0	0.2	0.1
Jewel Cave NM Class II	0	0	0.7	0.3	0	0	4.9	1.9	0	0	2.9	1.4	0	0	0.3	0.1
Lee Metcalf W Class II	0	0	0.6	0.1	0	0	4.1	0.8	0	0	2.7	0.5	0	0	0.7	0.2
Mt Naomi W Class II	0	0	0.2	0.0	0	0	1.3	0.2	0	0	1.0	0.1	0	0	0.1	0.0
Mt Rushmore Class II	0	0	0.7	0.3	0	0	4.4	2.2	0	0	2.6	1.5	0	0	0.3	0.2
Popo Agie W Class II	0	0	0.7	0.2	0	0	4.4	1.6	0	0	4.3	1.1	0	0	0.4	0.2
Soldier Creek WA Class II	0	0	0.5	0.2	0	0	3.2	1.6	0	0	2.2	1.2	0	0	0.3	0.1
Wellsville Mountain W Class II	0	0	0.2	0.0	0	0	1.2	0.2	0	0	0.9	0.1	0	0	0.1	0.0
Wind River IR Class II	0	0	1.0	0.5	4	0	6.5	3.2	0	0	4.4	2.1	0	0	1.2	0.6
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	64	19	18.58	13.9	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	146	61	29.20	22.0	299	165	60.4	37.1	0	0	4.7	1.8

Table C-12 Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised- Scenario 1

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	87	34	33.9	18.7	281	218	229.8	124.5
Bob Marshall W Class I	0	0	0.0	0.0	0	0	0.0	0.0	35	23	57.9	32.2	46	28	59.5	42.1
Bridger W Class I	0	0	0.0	0.0	0	0	0.0	0.0	42	21	54.7	22.7	225	146	452.4	151.5
Fitzpatrick W Class I	0	0	0.0	0.0	0	0	0.0	0.0	41	19	62.6	29.9	157	109	314.3	128.3
Fort Peck IR Class I	0	0	0.0	0.0	0	0	0.0	0.0	94	45	33.7	24.2	153	90	169.0	80.4
Gates of the Mountain W Class I	0	0	0.0	0.0	0	0	0.0	0.0	88	58	93.6	56.2	103	69	117.5	91.0
Grand Teton NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	46	26	31.2	17.8	165	92	181.4	76.1
North Absaorka W Class I	0	0	0.1	0.1	0	0	0.0	0.0	103	48	82.2	50.2	160	90	251.4	125.3
North Cheyenne IR Class I	0	0	0.1	0.1	0	0	0.5	0.3	362	313	139.1	80.3	365	337	337.9	154.9
Red Rock Lakes Class I	0	0	0.0	0.0	0	0	0.0	0.0	53	24	42.3	19.3	99	50	92.6	52.5
Scapegoat W Class I	0	0	0.0	0.0	0	0	0.0	0.0	59	38	112.6	45.6	68	48	112.7	66.9
Teton W Class I	0	0	0.1	0.0	0	0	0.0	0.0	63	23	77.0	30.5	154	92	264.2	118.8
Theodore Roosevelt NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	115	56	75.5	32.2	231	170	355.8	136.2
UL Bend W Class I	0	0	0.1	0.0	0	0	0.0	0.0	141	64	56.5	30.8	176	98	151.1	59.4
Washakie W Class I	0	0	0.2	0.1	0	0	0.0	0.0	92	47	98.5	58.1	177	115	363.0	152.0
Wind Cave NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	104	46	31.2	22.4	325	260	272.7	147.0
Yellowstone NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	115	53	83.7	37.4	193	105	223.0	96.3
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.1	0.0	0	0	0.1	0.0	182	112	173.1	59.3	212	136	300.4	125.0
Agate Fossil Beds NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	77	23	29.4	17.7	297	237	397.4	132.3
Big Horn Canyon NRA Class II	0	0	0.1	0.0	0	0	1.2	0.5	254	207	1686.2	623.6	357	313	1694.3	638.7
Black Elk W Class II	0	0	0.0	0.0	0	0	0.0	0.0	95	43	32.5	21.6	317	232	267.9	149.5
Cloud Peak Class II	0	0	0.0	0.0	0	0	0.1	0.0	123	68	100.3	32.7	216	145	237.5	169.7
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	651.3	365	365	1003.4	664.8
Devils Tower NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	124	65	43.4	26.0	326	278	276.4	133.9
Fort Belknap IR Class II	0	0	0.0	0.0	0	0	0.0	0.0	141	66	52.7	37.2	173	92	141.1	53.8
Fort Laramie NHS Class II	0	0	0.0	0.0	0	0	0.0	0.0	71	23	29.6	17.5	296	249	535.1	148.7
Jedediah Smith W Class II	0	0	0.0	0.0	0	0	0.0	0.0	49	26	31.6	14.7	168	95	173.2	66.1
Jewel Cave NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	99	45	33.7	24.3	319	251	290.8	141.1
Lee Metcalf W Class II	0	0	0.0	0.0	0	0	0.0	0.0	147	95	117.1	41.5	175	112	150.2	60.7
Mt Naomi W Class II	0	0	0.0	0.0	0	0	0.0	0.0	6	1	17.0	3.3	80	52	197.6	70.0
Mt Rushmore Class II	0	0	0.0	0.0	0	0	0.0	0.0	92	39	31.4	21.9	311	220	259.1	146.5
Popo Agie W Class II	0	0	0.0	0.0	0	0	0.0	0.0	40	23	55.7	22.1	211	137	498.2	162.6
Soldier Creek WA Class II	0	0	0.0	0.0	0	0	0.0	0.0	83	33	31.2	19.6	299	245	393.7	125.0
Wellsville Mountain W Class II	0	0	0.0	0.0	0	0	0.0	0.0	2	1	12.0	2.6	64	40	161.0	56.4
Wind River IR Class II	0	0	0.1	0.0	0	0	0.0	0.0	109	56	96.4	54.4	310	243	561.7	214.0
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	356	268	139.10	65.7	364	314	337.89	154.4
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.52	651.3	365	365	1003.41	664.8

Table C-13 Visibility - Method 2, EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised -Scenario 1A

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.52	n/a	0	0	1.80	n/a	0	0	2.63	n/a	0	0	0.37	n/a
Bob Marshall W Class I	0	0	0.16	n/a	0	0	0.53	n/a	0	0	0.89	n/a	0	0	0.22	n/a
Bridger W Class I	0	0	1.59	n/a	1	0	5.41	n/a	2	1	11.39	n/a	0	0	0.91	n/a
Fitzpatrick W Class I	0	0	1.63	n/a	1	0	5.55	n/a	1	1	11.74	n/a	0	0	1.01	n/a
Fort Peck IR Class I	0	0	1.00	n/a	0	0	3.40	n/a	0	0	4.39	n/a	0	0	1.69	n/a
Gates of the Mountain W Class I	0	0	0.25	n/a	0	0	0.81	n/a	0	0	1.16	n/a	0	0	0.55	n/a
Grand Teton NP Class I	0	0	0.54	n/a	0	0	1.80	n/a	0	0	2.91	n/a	0	0	0.33	n/a
North Absaorka W Class I	0	0	1.89	n/a	1	0	6.38	n/a	3	1	11.10	n/a	0	0	3.24	n/a
North Cheyenne IR Class I	3	0	6.03	n/a	37	7	20.05	n/a	326	229	118.45	n/a	0	0	1.41	n/a
Red Rock Lakes Class I	0	0	0.27	n/a	0	0	0.89	n/a	0	0	1.07	n/a	0	0	0.26	n/a
Scapegoat W Class I	0	0	0.25	n/a	0	0	0.84	n/a	0	0	1.29	n/a	0	0	0.46	n/a
Teton W Class I	0	0	0.76	n/a	0	0	2.54	n/a	0	0	4.56	n/a	0	0	1.27	n/a
Theodore Roosevelt NP Class I	0	0	0.93	n/a	0	0	3.15	n/a	1	0	5.38	n/a	0	0	1.01	n/a
UL Bend W Class I	0	0	0.68	n/a	0	0	2.17	n/a	0	0	2.73	n/a	0	0	0.94	n/a
Washakie W Class I	0	0	1.40	n/a	0	0	4.75	n/a	3	0	5.10	n/a	0	0	4.18	n/a
Wind Cave NP Class I	0	0	0.96	n/a	0	0	3.26	n/a	0	0	4.08	n/a	0	0	0.55	n/a
Yellowstone NP Class I	0	0	1.79	n/a	1	0	6.02	n/a	1	1	10.05	n/a	0	0	0.92	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	4.11	n/a	1	1	14.02	n/a	2	1	27.33	n/a	0	0	2.84	n/a
Agate Fossil Beds NM Class II	0	0	0.42	n/a	0	0	1.41	n/a	0	0	1.99	n/a	0	0	0.19	n/a
Big Horn Canyon NRA Class II	1	0	5.28	n/a	11	3	18.37	n/a	30	14	35.58	n/a	0	0	1.43	n/a
Black Elk W Class II	0	0	1.09	n/a	0	0	3.71	n/a	0	0	4.47	n/a	0	0	0.58	n/a
Cloud Peak Class II	2	1	11.95	n/a	6	4	40.61	n/a	18	8	63.80	n/a	0	0	2.75	n/a
Crow IR Class II	89	23	39.49	n/a	155	73	48.24	n/a	325	245	142.01	n/a	0	0	4.79	n/a
Devils Tower NM Class II	0	0	0.99	n/a	0	0	3.22	n/a	2	0	5.54	n/a	0	0	0.42	n/a
Fort Belknap IR Class II	0	0	0.83	n/a	0	0	2.73	n/a	0	0	3.38	n/a	0	0	0.86	n/a
Fort Laramie NHS Class II	0	0	0.84	n/a	0	0	2.83	n/a	0	0	3.27	n/a	0	0	0.36	n/a
Jedediah Smith W Class II	0	0	0.43	n/a	0	0	1.44	n/a	0	0	1.88	n/a	0	0	0.28	n/a
Jewel Cave NM Class II	0	0	1.28	n/a	0	0	4.35	n/a	1	0	5.27	n/a	0	0	0.68	n/a
Lee Metcalf W Class II	0	0	0.65	n/a	0	0	2.13	n/a	0	0	2.80	n/a	0	0	0.97	n/a
Mt Naomi W Class II	0	0	0.21	n/a	0	0	0.70	n/a	0	0	1.19	n/a	0	0	0.08	n/a
Mt Rushmore Class II	0	0	0.97	n/a	0	0	3.29	n/a	0	0	3.98	n/a	0	0	0.53	n/a
Popo Agie W Class II	0	0	1.30	n/a	0	0	4.32	n/a	2	0	8.75	n/a	0	0	0.87	n/a
Soldier Creek WA Class II	0	0	0.44	n/a	0	0	1.48	n/a	0	0	2.41	n/a	0	0	0.37	n/a
Wellsville Mountain W Class II	0	0	0.19	n/a	0	0	0.63	n/a	0	0	1.03	n/a	0	0	0.07	n/a
Wind River IR Class II	0	0	1.87	n/a	4	0	6.37	n/a	5	1	12.27	n/a	0	0	2.01	n/a
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	35	7	20.05	n/a	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	87	29	27.80	n/a	299	165	60.4	37.1	0	0	4.7	1.8

Table C-13 Visibility - Method 2, EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised -Scenario 1A

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.02	n/a	0	0	0.02	n/a	83	40	52.58	n/a	260	192	378.52	n/a
Bob Marshall W Class I	0	0	0.01	n/a	0	0	0.00	n/a	34	26	72.87	n/a	44	29	75.48	n/a
Bridger W Class I	0	0	0.05	n/a	0	0	0.03	n/a	44	30	105.58	n/a	207	146	870.73	n/a
Fitzpatrick W Class I	0	0	0.05	n/a	0	0	0.04	n/a	47	27	116.49	n/a	155	104	532.07	n/a
Fort Peck IR Class I	0	0	0.05	n/a	0	0	0.02	n/a	105	58	61.75	n/a	165	110	366.24	n/a
Gates of the Mountain W Class I	0	0	0.02	n/a	0	0	0.00	n/a	82	51	126.99	n/a	92	61	127.57	n/a
Grand Teton NP Class I	0	0	0.02	n/a	0	0	0.01	n/a	52	29	46.39	n/a	171	101	225.58	n/a
North Absaorka W Class I	0	0	0.17	n/a	0	0	0.04	n/a	115	58	113.06	n/a	168	104	429.47	n/a
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	357	311	170.25	n/a	364	331	476.92	n/a
Red Rock Lakes Class I	0	0	0.01	n/a	0	0	0.00	n/a	53	30	36.63	n/a	93	50	82.11	n/a
Scapegoat W Class I	0	0	0.02	n/a	0	0	0.00	n/a	57	42	189.57	n/a	67	49	201.88	n/a
Teton W Class I	0	0	0.07	n/a	0	0	0.02	n/a	65	34	135.35	n/a	169	111	433.94	n/a
Theodore Roosevelt NP Class I	0	0	0.05	n/a	0	0	0.01	n/a	94	48	75.77	n/a	217	150	480.15	n/a
UL Bend W Class I	0	0	0.05	n/a	0	0	0.01	n/a	142	69	57.81	n/a	173	98	154.91	n/a
Washakie W Class I	0	0	0.24	n/a	0	0	0.03	n/a	101	55	151.18	n/a	179	119	660.55	n/a
Wind Cave NP Class I	0	0	0.03	n/a	0	0	0.01	n/a	97	45	39.38	n/a	303	215	500.82	n/a
Yellowstone NP Class I	0	0	0.06	n/a	0	0	0.04	n/a	120	66	86.13	n/a	196	117	404.45	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.18	n/a	0	0	0.08	n/a	183	107	203.10	n/a	215	139	515.25	n/a
Agate Fossil Beds NM Class II	0	0	0.01	n/a	0	0	0.01	n/a	62	26	28.30	n/a	269	200	319.09	n/a
Big Horn Canyon NRA Class II	0	0	0.06	n/a	0	0	1.55	n/a	249	206	1711.58	n/a	357	313	1721.72	n/a
Black Elk W Class II	0	0	0.03	n/a	0	0	0.01	n/a	84	45	40.93	n/a	287	185	500.04	n/a
Cloud Peak Class II	0	0	0.08	n/a	0	0	0.09	n/a	129	83	182.14	n/a	218	154	399.47	n/a
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.33	n/a	365	365	1079.40	n/a
Devils Tower NM Class II	0	0	0.04	n/a	0	0	0.03	n/a	118	56	58.28	n/a	315	229	379.52	n/a
Fort Belknap IR Class II	0	0	0.05	n/a	0	0	0.01	n/a	147	73	62.74	n/a	179	104	201.26	n/a
Fort Laramie NHS Class II	0	0	0.03	n/a	0	0	0.01	n/a	57	22	33.90	n/a	273	208	443.81	n/a
Jedediah Smith W Class II	0	0	0.02	n/a	0	0	0.01	n/a	51	27	47.09	n/a	165	102	218.16	n/a
Jewel Cave NM Class II	0	0	0.04	n/a	0	0	0.02	n/a	91	48	50.22	n/a	299	211	545.82	n/a
Lee Metcalf W Class II	0	0	0.02	n/a	0	0	0.01	n/a	161	115	172.19	n/a	190	136	185.26	n/a
Mt Naomi W Class II	0	0	0.00	n/a	0	0	0.00	n/a	4	1	21.88	n/a	77	49	260.27	n/a
Mt Rushmore Class II	0	0	0.03	n/a	0	0	0.01	n/a	83	44	38.76	n/a	273	180	482.35	n/a
Popo Agie W Class II	0	0	0.05	n/a	0	0	0.03	n/a	43	31	74.95	n/a	189	121	960.43	n/a
Soldier Creek WA Class II	0	0	0.02	n/a	0	0	0.02	n/a	85	34	47.73	n/a	280	216	324.95	n/a
Wellsville Mountain W Class II	0	0	0.00	n/a	0	0	0.00	n/a	1	1	14.40	n/a	67	38	192.88	n/a
Wind River IR Class II	0	0	0.10	n/a	0	0	0.04	n/a	117	66	166.96	n/a	292	233	559.46	n/a
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	353	269	170.25	n/a	363	310	450.77	n/a
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	1076.33	n/a	365	365	1079.40	n/a

Table C-14 Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised- Scenario 1A

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.4	0.3	0	0	1.5	1.0	0	0	2.4	1.3	0	0	0.3	0.2
Bob Marshall W Class I	0	0	0.1	0.0	0	0	0.4	0.1	0	0	0.6	0.1	0	0	0.2	0.1
Bridger W Class I	0	0	0.6	0.2	0	0	2.0	0.7	0	0	3.9	0.9	0	0	0.5	0.3
Fitzpatrick W Class I	0	0	0.6	0.2	0	0	1.9	0.7	0	0	4.0	0.6	0	0	0.6	0.3
Fort Peck IR Class I	0	0	0.7	0.3	0	0	2.4	0.9	0	0	3.0	1.2	0	0	1.3	0.4
Gates of the Mountain W Class I	0	0	0.3	0.1	0	0	1.0	0.2	0	0	1.3	0.4	0	0	0.7	0.2
Grand Teton NP Class I	0	0	0.4	0.1	0	0	1.2	0.3	0	0	1.8	0.5	0	0	0.2	0.1
North Absaorka W Class I	0	0	1.1	0.4	0	0	3.6	1.3	2	0	6.2	1.9	0	0	2.1	0.8
North Cheyenne IR Class I	1	0	5.0	2.7	20	0	9.3	7.0	326	220	107.3	56.0	0	0	0.8	0.6
Red Rock Lakes Class I	0	0	0.3	0.1	0	0	1.0	0.2	0	0	1.2	0.2	0	0	0.3	0.1
Scapegoat W Class I	0	0	0.2	0.1	0	0	0.6	0.2	0	0	0.9	0.2	0	0	0.4	0.1
Teton W Class I	0	0	0.5	0.1	0	0	1.7	0.5	0	0	2.8	0.6	0	0	1.6	0.2
Theodore Roosevelt NP Class I	0	0	0.9	0.5	0	0	3.0	1.5	1	0	6.2	2.7	0	0	1.1	0.3
UL Bend W Class I	0	0	0.8	0.2	0	0	2.7	0.8	0	0	3.4	0.7	0	0	0.9	0.5
Washakie W Class I	0	0	0.8	0.4	0	0	2.6	1.4	0	0	4.1	1.6	0	0	2.8	0.8
Wind Cave NP Class I	0	0	0.7	0.4	0	0	2.2	1.2	0	0	2.7	1.6	0	0	0.3	0.2
Yellowstone NP Class I	0	0	1.0	0.2	0	0	3.4	0.6	1	0	5.6	1.0	0	0	0.9	0.3
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	2.4	0.5	1	0.0	8.1	2	2	1	15.2	2.1	0	0	2.2	0.9
Agate Fossil Beds NM Class II	0	0	0.4	0.2	0	0.0	1.3	1	0	0	1.7	0.9	0	0	0.3	0.1
Big Horn Canyon NRA Class II	0	0	2.8	1.2	4	0.0	9.1	4	27	7	24.6	9.8	0	0	0.8	0.5
Black Elk W Class II	0	0	0.7	0.4	0	0.0	2.3	1	0	0	2.7	1.5	0	0	0.3	0.2
Cloud Peak Class II	1	0	5.4	0.8	4	2.0	17.4	3	10	4	28.5	5.4	0	0	1.2	0.3
Crow IR Class II	79	22	38.5	19.9	140	59	47.3	25.4	323	229	92.2	59.3	0	0	4.7	1.8
Devils Tower NM Class II	0	0	1.1	0.5	0	0.0	3.5	2	1	0	5.6	1.9	0	0	0.4	0.3
Fort Belknap IR Class II	0	0	0.7	0.1	0	0.0	2.2	0	0	0	2.8	0.5	0	0	0.7	0.4
Fort Laramie NHS Class II	0	0	0.4	0.2	0	0.0	1.4	1	0	0	1.6	1.0	0	0	0.3	0.2
Jedediah Smith W Class II	0	0	0.3	0.1	0	0.0	0.9	0	0	0	1.2	0.4	0	0	0.2	0.1
Jewel Cave NM Class II	0	0	0.7	0.3	0	0.0	2.4	1	0	0	2.9	1.4	0	0	0.3	0.1
Lee Metcalf W Class II	0	0	0.6	0.1	0	0.0	2.1	0	0	0	2.7	0.5	0	0	0.7	0.2
Mt Naomi W Class II	0	0	0.2	0.0	0	0.0	0.6	0	0	0	1.0	0.1	0	0	0.1	0.0
Mt Rushmore Class II	0	0	0.7	0.3	0	0.0	2.2	1	0	0	2.6	1.5	0	0	0.3	0.2
Popo Agie W Class II	0	0	0.7	0.2	0	0.0	2.2	1	0	0	4.3	1.1	0	0	0.4	0.2
Soldier Creek WA Class II	0	0	0.5	0.2	0	0.0	1.6	1	0	0	2.2	1.2	0	0	0.3	0.1
Wellsville Mountain W Class II	0	0	0.2	0.0	0	0.0	0.6	0	0	0	0.9	0.1	0	0	0.1	0.0
Wind River IR Class II	0	0	1.0	0.5	0	0.0	3.2	2	0	0	4.4	2.1	0	0	1.2	0.6
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	20	0	9.29	7.0	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	61	11	14.60	11.0	299	165	60.4	37.1	0	0	4.7	1.8

Table C-14 Visibility - Method 6 and Monthly f(RH) values - Alternative H Revised- Scenario 1A

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	82	34	33.0	18.3	281	217	229.5	124.1
Bob Marshall W Class I	0	0	0.0	0.0	0	0	0.0	0.0	35	23	57.8	32.2	46	28	59.4	42.1
Bridger W Class I	0	0	0.0	0.0	0	0	0.0	0.0	42	21	54.4	22.0	225	146	450.4	151.2
Fitzpatrick W Class I	0	0	0.0	0.0	0	0	0.0	0.0	41	19	61.8	29.2	157	109	312.4	127.6
Fort Peck IR Class I	0	0	0.0	0.0	0	0	0.0	0.0	91	45	33.5	23.4	151	90	168.9	80.0
Gates of the Mountain W Class I	0	0	0.0	0.0	0	0	0.0	0.0	88	57	93.6	56.1	103	69	117.4	90.7
Grand Teton NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	46	25	31.2	17.8	165	92	181.1	75.9
North Absaorka W Class I	0	0	0.1	0.1	0	0	0.0	0.0	101	48	79.8	46.7	159	89	249.0	121.9
North Cheyenne IR Class I	0	0	0.1	0.1	0	0	0.5	0.3	361	311	136.1	74.7	365	334	335.4	151.5
Red Rock Lakes Class I	0	0	0.0	0.0	0	0	0.0	0.0	52	24	42.1	19.3	99	50	91.6	52.1
Scapegoat W Class I	0	0	0.0	0.0	0	0	0.0	0.0	59	38	112.6	45.2	68	48	112.7	66.4
Teton W Class I	0	0	0.1	0.0	0	0	0.0	0.0	63	22	75.3	30.3	154	92	262.5	118.4
Theodore Roosevelt NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	112	54	72.5	31.4	231	169	355.8	136.0
UL Bend W Class I	0	0	0.1	0.0	0	0	0.0	0.0	140	64	56.1	29.4	176	98	148.4	59.0
Washakie W Class I	0	0	0.2	0.1	0	0	0.0	0.0	92	47	95.9	56.5	177	114	360.5	151.2
Wind Cave NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	100	42	30.0	21.5	324	260	270.5	146.5
Yellowstone NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	114	53	83.2	37.1	193	105	219.7	95.7
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.1	0.0	0	0	0.1	0.0	181	111	172.3	58.0	212	136	293.0	124.3
Agate Fossil Beds NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	75	23	28.5	17.0	297	237	396.1	131.5
Big Horn Canyon NRA Class II	0	0	0.1	0.0	0	0	1.2	0.5	254	207	1685.84	621.7	357	313	1693.9	637.7
Black Elk W Class II	0	0	0.0	0.0	0	0	0.0	0.0	92	38	31.0	21.2	315	230	267.2	149.1
Cloud Peak Class II	0	0	0.0	0.0	0	0	0.1	0.0	120	63	82.9	30.7	215	145	235.6	161.3
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	650.3	365	365	1003.4	663.2
Devils Tower NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	120	60	41.1	24.9	326	277	275.5	133.1
Fort Belknap IR Class II	0	0	0.0	0.0	0	0	0.0	0.0	139	66	51.9	37.2	172	92	139.1	53.3
Fort Laramie NHS Class II	0	0	0.0	0.0	0	0	0.0	0.0	70	21	28.3	17.2	296	248	534.0	147.5
Jedediah Smith W Class II	0	0	0.0	0.0	0	0	0.0	0.0	49	26	31.6	14.7	168	94	173.0	66.1
Jewel Cave NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	94	42	31.2	23.5	318	251	290.0	140.8
Lee Metcalf W Class II	0	0	0.0	0.0	0	0	0.0	0.0	147	95	116.5	41.5	175	112	148.2	60.1
Mt Naomi W Class II	0	0	0.0	0.0	0	0	0.0	0.0	6	1	16.4	3.3	80	52	197.6	70.0
Mt Rushmore Class II	0	0	0.0	0.0	0	0	0.0	0.0	91	37	30.0	21.5	309	219	257.8	146.3
Popo Agie W Class II	0	0	0.0	0.0	0	0	0.0	0.0	40	23	55.4	21.2	211	137	496.0	162.4
Soldier Creek WA Class II	0	0	0.0	0.0	0	0	0.0	0.0	81	32	30.6	19.1	299	245	392.1	124.2
Wellsville Mountain W Class II	0	0	0.0	0.0	0	0	0.0	0.0	2	1	11.5	2.6	64	40	161.0	56.3
Wind River IR Class II	0	0	0.1	0.0	0	0	0.0	0.0	108	54	95.0	52.2	310	243	559.5	214.0
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	355	261	136.1	61.2	364	311	335.4	151.5
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	650.3	365	365	1003.4	663.2

Table C-15 Visibility -Method 2 EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised- Scenario 2

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.52	n/a	0	0	2.5	n/a	0	0	2.63	n/a	0	0	0.37	n/a
Bob Marshall W Class I	0	0	0.16	n/a	0	0	0.7	n/a	0	0	0.89	n/a	0	0	0.22	n/a
Bridger W Class I	0	0	1.59	n/a	2	0	7.4	n/a	2	1	11.39	n/a	0	0	0.91	n/a
Fitzpatrick W Class I	0	0	1.63	n/a	1	0	7.6	n/a	1	1	11.74	n/a	0	0	1.01	n/a
Fort Peck IR Class I	0	0	1.00	n/a	0	0	4.7	n/a	0	0	4.39	n/a	0	0	1.69	n/a
Gates of the Mountain W Class I	0	0	0.25	n/a	0	0	1.1	n/a	0	0	1.16	n/a	0	0	0.55	n/a
Grand Teton NP Class I	0	0	0.54	n/a	0	0	2.5	n/a	0	0	2.91	n/a	0	0	0.33	n/a
North Absaorka W Class I	0	0	1.89	n/a	2	0	8.7	n/a	3	1	11.10	n/a	0	0	3.24	n/a
North Cheyenne IR Class I	3	0	6.03	n/a	72	17	27.7	n/a	326	229	118.45	n/a	0	0	1.41	n/a
Red Rock Lakes Class I	0	0	0.27	n/a	0	0	1.2	n/a	0	0	1.07	n/a	0	0	0.26	n/a
Scapegoat W Class I	0	0	0.25	n/a	0	0	1.2	n/a	0	0	1.29	n/a	0	0	0.46	n/a
Teton W Class I	0	0	0.76	n/a	0	0	3.5	n/a	0	0	4.56	n/a	0	0	1.27	n/a
Theodore Roosevelt NP Class I	0	0	0.93	n/a	0	0	4.3	n/a	1	0	5.38	n/a	0	0	1.01	n/a
UL Bend W Class I	0	0	0.68	n/a	0	0	3.0	n/a	0	0	2.73	n/a	0	0	0.94	n/a
Washakie W Class I	0	0	1.40	n/a	1	0	6.5	n/a	3	0	5.10	n/a	0	0	4.18	n/a
Wind Cave NP Class I	0	0	0.96	n/a	0	0	4.5	n/a	0	0	4.08	n/a	0	0	0.55	n/a
Yellowstone NP Class I	0	0	1.79	n/a	1	0	8.3	n/a	1	1	10.05	n/a	0	0	0.92	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	4.11	n/a	4	1	19.2	n/a	2	1	27.33	n/a	0	0	2.84	n/a
Agate Fossil Beds NM Class II	0	0	0.42	n/a	0	0	1.9	n/a	0	0	1.99	n/a	0	0	0.19	n/a
Big Horn Canyon NRA Class II	1	0	5.28	n/a	16	4	25.1	n/a	30	14	35.58	n/a	0	0	1.43	n/a
Black Elk W Class II	0	0	1.09	n/a	1	0	5.1	n/a	0	0	4.47	n/a	0	0	0.58	n/a
Cloud Peak Class II	2	1	11.95	n/a	9	4	55.6	n/a	18	8	63.80	n/a	0	0	2.75	n/a
Crow IR Class II	89	23	39.49	n/a	218	137	96.1	n/a	325	245	142.01	n/a	0	0	4.79	n/a
Devils Tower NM Class II	0	0	0.99	n/a	0	0	4.5	n/a	2	0	5.54	n/a	0	0	0.42	n/a
Fort Belknap IR Class II	0	0	0.83	n/a	0	0	3.8	n/a	0	0	3.38	n/a	0	0	0.86	n/a
Fort Laramie NHS Class II	0	0	0.84	n/a	0	0	3.9	n/a	0	0	3.27	n/a	0	0	0.36	n/a
Jedediah Smith W Class II	0	0	0.43	n/a	0	0	2.0	n/a	0	0	1.88	n/a	0	0	0.28	n/a
Jewel Cave NM Class II	0	0	1.28	n/a	1	0	6.0	n/a	1	0	5.27	n/a	0	0	0.68	n/a
Lee Metcalf W Class II	0	0	0.65	n/a	0	0	2.9	n/a	0	0	2.80	n/a	0	0	0.97	n/a
Mt Naomi W Class II	0	0	0.21	n/a	0	0	1.0	n/a	0	0	1.19	n/a	0	0	0.08	n/a
Mt Rushmore Class II	0	0	0.97	n/a	0	0	4.5	n/a	0	0	3.98	n/a	0	0	0.53	n/a
Popo Agie W Class II	0	0	1.30	n/a	3	0	5.9	n/a	2	0	8.75	n/a	0	0	0.87	n/a
Soldier Creek WA Class II	0	0	0.44	n/a	0	0	2.0	n/a	0	0	2.41	n/a	0	0	0.37	n/a
Wellsville Mountain W Class II	0	0	0.19	n/a	0	0	0.9	n/a	0	0	1.03	n/a	0	0	0.07	n/a
Wind River IR Class II	0	0	1.87	n/a	6	0	8.7	n/a	5	1	12.27	n/a	0	0	2.01	n/a
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	2	0	6.03	n/a	67	17	27.71	n/a	281	157	86.85	n/a	0	0	1.23	n/a
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	17	0	8.34	n/a	141	60	38.14	n/a	304	193	142.01	n/a	0	0	4.79	n/a

Table C-15 Visibility -Method 2 EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised- Scenario 2

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.02	n/a	0	0	0.02	n/a	86	40	53.2	n/a	261	194	378.7	n/a
Bob Marshall W Class I	0	0	0.01	n/a	0	0	0.00	n/a	34	26	72.9	n/a	44	29	75.7	n/a
Bridger W Class I	0	0	0.05	n/a	0	0	0.03	n/a	44	31	107.4	n/a	207	146	872.2	n/a
Fitzpatrick W Class I	0	0	0.05	n/a	0	0	0.04	n/a	47	27	118.4	n/a	155	104	532.7	n/a
Fort Peck IR Class I	0	0	0.05	n/a	0	0	0.02	n/a	106	58	62.4	n/a	165	110	366.3	n/a
Gates of the Mountain W Class I	0	0	0.02	n/a	0	0	0.00	n/a	83	51	127.0	n/a	92	61	127.6	n/a
Grand Teton NP Class I	0	0	0.02	n/a	0	0	0.01	n/a	54	29	46.4	n/a	171	101	225.7	n/a
North Absaorka W Class I	0	0	0.17	n/a	0	0	0.04	n/a	115	58	114.3	n/a	168	104	431.6	n/a
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	358	311	173.0	n/a	364	332	480.7	n/a
Red Rock Lakes Class I	0	0	0.01	n/a	0	0	0.00	n/a	53	30	36.7	n/a	93	50	82.5	n/a
Scapegoat W Class I	0	0	0.02	n/a	0	0	0.00	n/a	57	42	189.6	n/a	67	49	201.9	n/a
Teton W Class I	0	0	0.07	n/a	0	0	0.02	n/a	66	34	136.3	n/a	169	112	434.9	n/a
Theodore Roosevelt NP Class I	0	0	0.05	n/a	0	0	0.01	n/a	94	49	77.0	n/a	217	150	481.0	n/a
UL Bend W Class I	0	0	0.05	n/a	0	0	0.01	n/a	142	69	58.0	n/a	173	98	155.0	n/a
Washakie W Class I	0	0	0.24	n/a	0	0	0.03	n/a	101	56	152.8	n/a	179	119	662.3	n/a
Wind Cave NP Class I	0	0	0.03	n/a	0	0	0.01	n/a	98	48	40.5	n/a	303	216	501.3	n/a
Yellowstone NP Class I	0	0	0.06	n/a	0	0	0.04	n/a	120	66	86.8	n/a	196	117	406.7	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.18	n/a	0	0	0.08	n/a	184	107	203.5	n/a	215	139	520.2	n/a
Agate Fossil Beds NM Class II	0	0	0.01	n/a	0	0	0.01	n/a	63	26	28.6	n/a	269	201	319.1	n/a
Big Horn Canyon NRA Class II	0	0	0.06	n/a	0	0	1.55	n/a	249	206	1711.8	n/a	357	313	1721.9	n/a
Black Elk W Class II	0	0	0.03	n/a	0	0	0.01	n/a	85	45	41.3	n/a	288	185	500.6	n/a
Cloud Peak Class II	0	0	0.08	n/a	0	0	0.09	n/a	130	83	197.1	n/a	219	154	403.4	n/a
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.3	n/a	365	365	1079.4	n/a
Devils Tower NM Class II	0	0	0.04	n/a	0	0	0.03	n/a	122	57	58.8	n/a	315	230	380.0	n/a
Fort Belknap IR Class II	0	0	0.05	n/a	0	0	0.01	n/a	148	73	63.1	n/a	179	104	201.3	n/a
Fort Laramie NHS Class II	0	0	0.03	n/a	0	0	0.01	n/a	57	22	34.9	n/a	273	208	444.2	n/a
Jedediah Smith W Class II	0	0	0.02	n/a	0	0	0.01	n/a	51	27	47.1	n/a	165	102	218.3	n/a
Jewel Cave NM Class II	0	0	0.04	n/a	0	0	0.02	n/a	91	48	50.7	n/a	300	211	546.4	n/a
Lee Metcalf W Class II	0	0	0.02	n/a	0	0	0.01	n/a	161	115	172.2	n/a	190	136	185.3	n/a
Mt Naomi W Class II	0	0	0.00	n/a	0	0	0.00	n/a	4	1	22.1	n/a	77	49	260.3	n/a
Mt Rushmore Class II	0	0	0.03	n/a	0	0	0.01	n/a	85	44	39.0	n/a	274	181	482.8	n/a
Popo Agie W Class II	0	0	0.05	n/a	0	0	0.03	n/a	43	32	76.5	n/a	189	121	962.0	n/a
Soldier Creek WA Class II	0	0	0.02	n/a	0	0	0.02	n/a	87	35	48.2	n/a	280	216	325.5	n/a
Wellsville Mountain W Class II	0	0	0.00	n/a	0	0	0.00	n/a	1	1	14.6	n/a	67	38	192.9	n/a
Wind River IR Class II	0	0	0.10	n/a	0	0	0.04	n/a	119	66	167.9	n/a	292	233	1150.0	n/a
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	354	273	173.00	n/a	363	312	454.81	n/a
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.34	n/a	365	365	1079.40	n/a

Table C-16 Visibility -Method 6 and Monthly f(RH) values - Alternative H Revised - Scenario 2

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.4	0.3	0	0	2.0	1.4	0	0	2.4	1.3	0	0	0.3	0.2
Bob Marshall W Class I	0	0	0.1	0.0	0	0	0.5	0.2	0	0	0.6	0.1	0	0	0.2	0.1
Bridger W Class I	0	0	0.6	0.2	0	0	2.8	0.9	0	0	3.9	0.9	0	0	0.5	0.3
Fitzpatrick W Class I	0	0	0.6	0.2	0	0	2.7	0.9	0	0	4.0	0.6	0	0	0.6	0.3
Fort Peck IR Class I	0	0	0.7	0.3	0	0	3.4	1.3	0	0	3.0	1.2	0	0	1.3	0.4
Gates of the Mountain W Class I	0	0	0.3	0.1	0	0	1.4	0.3	0	0	1.3	0.4	0	0	0.7	0.2
Grand Teton NP Class I	0	0	0.4	0.1	0	0	1.6	0.5	0	0	1.8	0.5	0	0	0.2	0.1
North Absaorka W Class I	0	0	1.1	0.4	0	0	4.9	1.8	2	0	6.2	1.9	0	0	2.1	0.8
North Cheyenne IR Class I	1	0	5.0	2.7	37	7	15.2	9.9	326	220	107.3	56.0	0	0	0.8	0.6
Red Rock Lakes Class I	0	0	0.3	0.1	0	0	1.4	0.3	0	0	1.2	0.2	0	0	0.3	0.1
Scapegoat W Class I	0	0	0.2	0.1	0	0	0.8	0.2	0	0	0.9	0.2	0	0	0.4	0.1
Teton W Class I	0	0	0.5	0.1	0	0	2.3	0.7	0	0	2.8	0.6	0	0	1.6	0.2
Theodore Roosevelt NP Class I	0	0	0.9	0.5	0	0	4.1	2.1	1	0	6.2	2.7	0	0	1.1	0.3
UL Bend W Class I	0	0	0.8	0.2	0	0	3.7	1.1	0	0	3.4	0.7	0	0	0.9	0.5
Washakie W Class I	0	0	0.8	0.4	0	0	3.5	1.9	0	0	4.1	1.6	0	0	2.8	0.8
Wind Cave NP Class I	0	0	0.7	0.4	0	0	3.0	1.7	0	0	2.7	1.6	0	0	0.3	0.2
Yellowstone NP Class I	0	0	1.0	0.2	0	0	4.6	0.8	1	0	5.6	1.0	0	0	0.9	0.3
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	2.4	0.5	1	1	11.2	2.3	2	1	15.2	2.1	0	0	2.2	0.9
Agate Fossil Beds NM Class II	0	0	0.4	0.2	0	0	1.8	0.8	0	0	1.7	0.9	0	0	0.3	0.1
Big Horn Canyon NRA Class II	0	0	2.8	1.2	10	1	12.6	5.5	27	7	24.6	9.8	0	0	0.8	0.5
Black Elk W Class II	0	0	0.7	0.4	0	0	3.2	1.7	0	0	2.7	1.5	0	0	0.3	0.2
Cloud Peak Class II	1	0	5.4	0.8	6	3	24.1	3.7	10	4	28.5	5.4	0	0	1.2	0.3
Crow IR Class II	79	22	38.5	19.9	208	120	94.0	50.5	323	229	92.2	59.3	0	0	4.7	1.8
Devils Tower NM Class II	0	0	1.1	0.5	0	0	4.9	2.3	1	0	5.6	1.9	0	0	0.4	0.3
Fort Belknap IR Class II	0	0	0.7	0.1	0	0	3.0	0.6	0	0	2.8	0.5	0	0	0.7	0.4
Fort Laramie NHS Class II	0	0	0.4	0.2	0	0	1.9	1.0	0	0	1.6	1.0	0	0	0.3	0.2
Jedediah Smith W Class II	0	0	0.3	0.1	0	0	1.3	0.4	0	0	1.2	0.4	0	0	0.2	0.1
Jewel Cave NM Class II	0	0	0.7	0.3	0	0	3.4	1.3	0	0	2.9	1.4	0	0	0.3	0.1
Lee Metcalf W Class II	0	0	0.6	0.1	0	0	2.9	0.6	0	0	2.7	0.5	0	0	0.7	0.2
Mt Naomi W Class II	0	0	0.2	0.0	0	0	0.9	0.1	0	0	1.0	0.1	0	0	0.1	0.0
Mt Rushmore Class II	0	0	0.7	0.3	0	0	3.0	1.5	0	0	2.6	1.5	0	0	0.3	0.2
Popo Agie W Class II	0	0	0.7	0.2	0	0	3.0	1.1	0	0	4.3	1.1	0	0	0.4	0.2
Soldier Creek WA Class II	0	0	0.5	0.2	0	0	2.2	1.1	0	0	2.2	1.2	0	0	0.3	0.1
Wellsville Mountain W Class II	0	0	0.2	0.0	0	0	0.8	0.1	0	0	0.9	0.1	0	0	0.1	0.0
Wind River IR Class II	0	0	1.0	0.5	0	0	4.5	2.2	0	0	4.4	2.1	0	0	1.2	0.6
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	37	7	15.18	9.9	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	118	38	21.14	16.6	299	165	60.4	37.1	0	0	4.7	1.8

Table C-16 Visibility -Method 6 and Monthly f(RH) values - Alternative H Revised - Scenario 2

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	84	34	33.3	18.5	281	217	229.6	124.3
Bob Marshall W Class I	0	0	0.0	0.0	0	0	0.0	0.0	35	23	57.9	32.2	46	28	59.4	42.1
Bridger W Class I	0	0	0.0	0.0	0	0	0.0	0.0	42	21	54.5	22.2	225	146	451.2	151.4
Fitzpatrick W Class I	0	0	0.0	0.0	0	0	0.0	0.0	41	19	62.1	29.5	157	109	313.1	127.9
Fort Peck IR Class I	0	0	0.0	0.0	0	0	0.0	0.0	92	45	33.6	23.7	152	90	168.9	80.1
Gates of the Mountain W Class I	0	0	0.0	0.0	0	0	0.0	0.0	88	57	93.6	56.2	103	69	117.5	90.8
Grand Teton NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	46	25	31.2	17.8	165	92	181.2	75.9
North Absaorka W Class I	0	0	0.1	0.1	0	0	0.0	0.0	102	48	80.7	48.0	159	90	249.9	123.2
North Cheyenne IR Class I	0	0	0.1	0.1	0	0	0.5	0.3	361	311	137.3	77.4	365	335	336.4	152.8
Red Rock Lakes Class I	0	0	0.0	0.0	0	0	0.0	0.0	52	24	42.2	19.3	99	50	92.0	52.3
Scapegoat W Class I	0	0	0.0	0.0	0	0	0.0	0.0	59	38	112.6	45.3	68	48	112.7	66.6
Teton W Class I	0	0	0.1	0.0	0	0	0.0	0.0	63	22	76.0	30.4	154	92	263.2	118.6
Theodore Roosevelt NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	114	55	73.7	31.7	231	169	355.8	136.1
UL Bend W Class I	0	0	0.1	0.0	0	0	0.0	0.0	140	64	56.3	29.9	176	98	149.4	59.1
Washakie W Class I	0	0	0.2	0.1	0	0	0.0	0.0	92	47	96.9	57.1	177	114	361.5	151.6
Wind Cave NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	102	44	30.3	21.8	324	260	271.3	146.7
Yellowstone NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	114	53	83.4	37.2	193	105	220.9	95.9
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.1	0.0	0	0	0.1	0.0	182	112	172.6	58.5	212	136	295.8	124.6
Agate Fossil Beds NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	76	23	28.8	17.3	297	237	396.6	131.8
Big Horn Canyon NRA Class II	0	0	0.1	0.0	0	0	1.2	0.5	254	207	1686.0	622.5	357	313	1694.1	638.1
Black Elk W Class II	0	0	0.0	0.0	0	0	0.0	0.0	93	40	31.5	21.4	317	232	267.5	149.2
Cloud Peak Class II	0	0	0.0	0.0	0	0	0.1	0.0	121	64	89.6	31.3	215	145	236.4	168.0
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	650.7	365	365	1003.4	663.6
Devils Tower NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	121	63	42.0	25.2	326	277	275.9	133.4
Fort Belknap IR Class II	0	0	0.0	0.0	0	0	0.0	0.0	140	66	52.2	37.2	172	92	139.8	53.5
Fort Laramie NHS Class II	0	0	0.0	0.0	0	0	0.0	0.0	70	21	28.8	17.4	296	249	534.4	147.9
Jedediah Smith W Class II	0	0	0.0	0.0	0	0	0.0	0.0	49	26	31.6	14.7	168	94	173.1	66.1
Jewel Cave NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	96	44	32.1	23.8	319	251	290.3	140.9
Lee Metcalf W Class II	0	0	0.0	0.0	0	0	0.0	0.0	147	95	116.7	41.5	175	112	149.0	60.3
Mt Naomi W Class II	0	0	0.0	0.0	0	0	0.0	0.0	6	1	16.6	3.3	80	52	197.6	70.0
Mt Rushmore Class II	0	0	0.0	0.0	0	0	0.0	0.0	91	38	30.5	21.6	309	220	258.0	146.4
Popo Agie W Class II	0	0	0.0	0.0	0	0	0.0	0.0	40	23	55.5	21.5	211	137	496.8	162.4
Soldier Creek WA Class II	0	0	0.0	0.0	0	0	0.0	0.0	81	33	30.9	19.3	299	245	392.7	124.5
Wellsville Mountain W Class II	0	0	0.0	0.0	0	0	0.0	0.0	2	1	11.7	2.6	64	40	161.0	56.3
Wind River IR Class II	0	0	0.1	0.0	0	0	0.0	0.0	109	54	95.5	53.0	310	243	560.3	214.0
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	355	264	137.28	62.6	364	312	336.40	152.6
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.51	650.7	365	365	1003.40	663.6

Table C-17 Visibility -Method 2, EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised- Scenario 2A

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.52	n/a	0	0	1.24	n/a	0	0	2.63	n/a	0	0	0.37	n/a
Bob Marshall W Class I	0	0	0.16	n/a	0	0	0.36	n/a	0	0	0.89	n/a	0	0	0.22	n/a
Bridger W Class I	0	0	1.59	n/a	0	0	3.70	n/a	2	1	11.39	n/a	0	0	0.91	n/a
Fitzpatrick W Class I	0	0	1.63	n/a	0	0	3.80	n/a	1	1	11.74	n/a	0	0	1.01	n/a
Fort Peck IR Class I	0	0	1.00	n/a	0	0	2.33	n/a	0	0	4.39	n/a	0	0	1.69	n/a
Gates of the Mountain W Class I	0	0	0.25	n/a	0	0	0.56	n/a	0	0	1.16	n/a	0	0	0.55	n/a
Grand Teton NP Class I	0	0	0.54	n/a	0	0	1.23	n/a	0	0	2.91	n/a	0	0	0.33	n/a
North Absaorka W Class I	0	0	1.89	n/a	0	0	4.37	n/a	3	1	11.10	n/a	0	0	3.24	n/a
North Cheyenne IR Class I	3	0	6.03	n/a	18	2	13.86	n/a	326	229	118.45	n/a	0	0	1.41	n/a
Red Rock Lakes Class I	0	0	0.27	n/a	0	0	0.61	n/a	0	0	1.07	n/a	0	0	0.26	n/a
Scapegoat W Class I	0	0	0.25	n/a	0	0	0.57	n/a	0	0	1.29	n/a	0	0	0.46	n/a
Teton W Class I	0	0	0.76	n/a	0	0	1.74	n/a	0	0	4.56	n/a	0	0	1.27	n/a
Theodore Roosevelt NP Class I	0	0	0.93	n/a	0	0	2.16	n/a	1	0	5.38	n/a	0	0	1.01	n/a
UL Bend W Class I	0	0	0.68	n/a	0	0	1.50	n/a	0	0	2.73	n/a	0	0	0.94	n/a
Washakie W Class I	0	0	1.40	n/a	0	0	3.26	n/a	3	0	5.10	n/a	0	0	4.18	n/a
Wind Cave NP Class I	0	0	0.96	n/a	0	0	2.23	n/a	0	0	4.08	n/a	0	0	0.55	n/a
Yellowstone NP Class I	0	0	1.79	n/a	0	0	4.13	n/a	1	1	10.05	n/a	0	0	0.92	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	4.11	n/a	1	0	9.61	n/a	2	1	27.33	n/a	0	0	2.84	n/a
Agate Fossil Beds NM Class II	0	0	0.42	n/a	0	0	0.97	n/a	0	0	1.99	n/a	0	0	0.19	n/a
Big Horn Canyon NRA Class II	1	0	5.28	n/a	4	1	12.56	n/a	30	14	35.58	n/a	0	0	1.43	n/a
Black Elk W Class II	0	0	1.09	n/a	0	0	2.54	n/a	0	0	4.47	n/a	0	0	0.58	n/a
Cloud Peak Class II	2	1	11.95	n/a	4	2	27.80	n/a	18	8	63.80	n/a	0	0	2.75	n/a
Crow IR Class II	89	23	39.49	n/a	137	56	48.06	n/a	325	245	142.01	n/a	0	0	4.79	n/a
Devils Tower NM Class II	0	0	0.99	n/a	0	0	2.24	n/a	2	0	5.54	n/a	0	0	0.42	n/a
Fort Belknap IR Class II	0	0	0.83	n/a	0	0	1.88	n/a	0	0	3.38	n/a	0	0	0.86	n/a
Fort Laramie NHS Class II	0	0	0.84	n/a	0	0	1.93	n/a	0	0	3.27	n/a	0	0	0.36	n/a
Jedediah Smith W Class II	0	0	0.43	n/a	0	0	0.99	n/a	0	0	1.88	n/a	0	0	0.28	n/a
Jewel Cave NM Class II	0	0	1.28	n/a	0	0	2.97	n/a	1	0	5.27	n/a	0	0	0.68	n/a
Lee Metcalf W Class II	0	0	0.65	n/a	0	0	1.47	n/a	0	0	2.80	n/a	0	0	0.97	n/a
Mt Naomi W Class II	0	0	0.21	n/a	0	0	0.48	n/a	0	0	1.19	n/a	0	0	0.08	n/a
Mt Rushmore Class II	0	0	0.97	n/a	0	0	2.25	n/a	0	0	3.98	n/a	0	0	0.53	n/a
Popo Agie W Class II	0	0	1.30	n/a	0	0	2.96	n/a	2	0	8.75	n/a	0	0	0.87	n/a
Soldier Creek WA Class II	0	0	0.44	n/a	0	0	1.01	n/a	0	0	2.41	n/a	0	0	0.37	n/a
Wellsville Mountain W Class II	0	0	0.19	n/a	0	0	0.43	n/a	0	0	1.03	n/a	0	0	0.07	n/a
Wind River IR Class II	0	0	1.87	n/a	0	0	4.35	n/a	5	1	12.27	n/a	0	0	2.01	n/a
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	17	2	13.86	n/a	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	60	11	19.07	n/a	299	165	60.4	37.1	0	0	4.7	1.8

Table C-17 Visibility -Method 2, EPA f(RH) values, 95% RHMAX, FLAG Background - Alternative H Revised- Scenario 2A

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.02	n/a	0	0	0.02	n/a	83	40	52.08	n/a	260	192	378.35	n/a
Bob Marshall W Class I	0	0	0.01	n/a	0	0	0.00	n/a	34	26	72.87	n/a	44	29	75.31	n/a
Bridger W Class I	0	0	0.05	n/a	0	0	0.03	n/a	44	30	103.97	n/a	207	145	869.48	n/a
Fitzpatrick W Class I	0	0	0.05	n/a	0	0	0.04	n/a	47	27	114.84	n/a	155	104	531.49	n/a
Fort Peck IR Class I	0	0	0.05	n/a	0	0	0.02	n/a	18	9	35.34	n/a	164	110	366.17	n/a
Gates of the Mountain W Class I	0	0	0.02	n/a	0	0	0.00	n/a	82	50	126.99	n/a	92	61	127.57	n/a
Grand Teton NP Class I	0	0	0.02	n/a	0	0	0.01	n/a	52	29	46.38	n/a	171	101	225.48	n/a
North Absaorka W Class I	0	0	0.17	n/a	0	0	0.04	n/a	115	58	112.01	n/a	168	104	427.65	n/a
North Cheyenne IR Class I	0	0	0.11	n/a	0	0	0.70	n/a	357	305	167.95	n/a	364	330	473.71	n/a
Red Rock Lakes Class I	0	0	0.01	n/a	0	0	0.00	n/a	52	29	36.58	n/a	93	50	81.84	n/a
Scapegoat W Class I	0	0	0.02	n/a	0	0	0.00	n/a	57	42	189.57	n/a	67	49	201.86	n/a
Teton W Class I	0	0	0.07	n/a	0	0	0.02	n/a	65	34	134.55	n/a	169	111	433.15	n/a
Theodore Roosevelt NP Class I	0	0	0.05	n/a	0	0	0.01	n/a	94	48	74.78	n/a	216	150	479.46	n/a
UL Bend W Class I	0	0	0.05	n/a	0	0	0.01	n/a	142	68	57.68	n/a	173	98	154.87	n/a
Washakie W Class I	0	0	0.24	n/a	0	0	0.03	n/a	99	54	149.82	n/a	179	119	659.05	n/a
Wind Cave NP Class I	0	0	0.03	n/a	0	0	0.01	n/a	97	44	38.40	n/a	302	215	500.42	n/a
Yellowstone NP Class I	0	0	0.06	n/a	0	0	0.04	n/a	138	76	88.63	n/a	138	76	88.63	n/a
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.18	n/a	0	0	0.08	n/a	183	107	202.79	n/a	215	139	511.05	n/a
Agate Fossil Beds NM Class II	0	0	0.01	n/a	0	0	0.01	n/a	61	25	28.09	n/a	269	200	319.07	n/a
Big Horn Canyon NRA Class II	0	0	0.06	n/a	0	0	1.55	n/a	249	204	1711.44	n/a	357	313	1721.57	n/a
Black Elk W Class II	0	0	0.03	n/a	0	0	0.01	n/a	25	3	28.96	n/a	286	185	499.61	n/a
Cloud Peak Class II	0	0	0.08	n/a	0	0	0.09	n/a	129	82	169.32	n/a	218	154	396.12	n/a
Crow IR Class II	0	0	0.74	n/a	1	0	8.51	n/a	365	365	1076.33	n/a	365	365	1079.40	n/a
Devils Tower NM Class II	0	0	0.04	n/a	0	0	0.03	n/a	117	55	57.85	n/a	314	228	379.08	n/a
Fort Belknap IR Class II	0	0	0.05	n/a	0	0	0.01	n/a	147	73	62.45	n/a	178	104	201.2	n/a
Fort Laramie NHS Class II	0	0	0.03	n/a	0	0	0.01	n/a	57	22	33.00	n/a	273	208	443.51	n/a
Jededlah Smith W Class II	0	0	0.02	n/a	0	0	0.01	n/a	51	27	47.08	n/a	165	102	218.08	n/a
Jewel Cave NM Class II	0	0	0.04	n/a	0	0	0.02	n/a	88	48	49.84	n/a	299	211	545.32	n/a
Lee Metcalf W Class II	0	0	0.02	n/a	0	0	0.01	n/a	161	115	172.19	n/a	190	136	185.23	n/a
Mt Naomi W Class II	0	0	0.00	n/a	0	0	0.00	n/a	4	1	21.68	n/a	77	49	260.24	n/a
Mt Rushmore Class II	0	0	0.03	n/a	0	0	0.01	n/a	83	43	38.52	n/a	272	180	481.95	n/a
Popo Agie W Class II	0	0	0.05	n/a	0	0	0.03	n/a	43	31	73.67	n/a	188	121	959.08	n/a
Soldier Creek WA Class II	0	0	0.02	n/a	0	0	0.02	n/a	85	34	47.36	n/a	280	216	324.51	n/a
Wellsville Mountain W Class II	0	0	0.00	n/a	0	0	0.00	n/a	1	1	14.21	n/a	67	38	192.87	n/a
Wind River IR Class II	0	0	0.10	n/a	0	0	0.04	n/a	117	66	166.15	n/a	292	233	218.08	n/a
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	353	264	167.95	n/a	363	308	447.35	n/a
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	1076.33	n/a	365	365	1079.40	n/a

Table C-18 Visibility -Method 6 and Monthly f(RH) Values - Alternative H Revised- Scenario 2A

Receptor Set	MT CBNG RFD Construction - ALT H revised				MT CBNG RFD Operation - ALT H revised				MT CBNG RFFA Construction and Operation - ALT H revised				MTOG RFD Construction - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.4	0.3	0	0	1.00	0.68	0	0	2.4	1.3	0	0	0.3	0.2
Bob Marshall W Class I	0	0	0.1	0.0	0	0	0.24	0.08	0	0	0.6	0.1	0	0	0.2	0.1
Bridger W Class I	0	0	0.6	0.2	0	0	1.39	0.45	0	0	3.9	0.9	0	0	0.5	0.3
Fitzpatrick W Class I	0	0	0.6	0.2	0	0	1.34	0.46	0	0	4.0	0.6	0	0	0.6	0.3
Fort Peck IR Class I	0	0	0.7	0.3	0	0	1.68	0.64	0	0	3.0	1.2	0	0	1.3	0.4
Gates of the Mountain W Class I	0	0	0.3	0.1	0	0	0.68	0.16	0	0	1.3	0.4	0	0	0.7	0.2
Grand Teton NP Class I	0	0	0.4	0.1	0	0	0.80	0.23	0	0	1.8	0.5	0	0	0.2	0.1
North Absaorka W Class I	0	0	1.1	0.4	0	0	2.46	0.92	2	0	6.2	1.9	0	0	2.1	0.8
North Cheyenne IR Class I	1	0	5.0	2.7	7	0	7.59	4.94	326	220	107.3	56.0	0	0	0.8	0.6
Red Rock Lakes Class I	0	0	0.3	0.1	0	0	0.68	0.13	0	0	1.2	0.2	0	0	0.3	0.1
Scapegoat W Class I	0	0	0.2	0.1	0	0	0.41	0.12	0	0	0.9	0.2	0	0	0.4	0.1
Teton W Class I	0	0	0.5	0.1	0	0	1.16	0.34	0	0	2.8	0.6	0	0	1.6	0.2
Theodore Roosevelt NP Class I	0	0	0.9	0.5	0	0	2.07	1.05	1	0	6.2	2.7	0	0	1.1	0.3
UL Bend W Class I	0	0	0.8	0.2	0	0	1.85	0.55	0	0	3.4	0.7	0	0	0.9	0.5
Washakie W Class I	0	0	0.8	0.4	0	0	1.77	0.94	0	0	4.1	1.6	0	0	2.8	0.8
Wind Cave NP Class I	0	0	0.7	0.4	0	0	1.52	0.84	0	0	2.7	1.6	0	0	0.3	0.2
Yellowstone NP Class I	0	0	1.0	0.2	0	0	2.32	0.42	1	0	5.6	1.0	0	0	0.9	0.3
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	2.4	0.5	1	0	5.57	1.14	2	1	15.2	2.1	0	0	2.2	0.9
Agate Fossil Beds NM Class II	0	0	0.4	0.2	0	0	0.92	0.40	0	0	1.7	0.9	0	0	0.3	0.1
Big Horn Canyon NRA Class II	0	0	2.8	1.2	1	0	6.30	2.75	27	7	24.6	9.8	0	0	0.8	0.5
Black Elk W Class II	0	0	0.7	0.4	0	0	1.58	0.83	0	0	2.7	1.5	0	0	0.3	0.2
Cloud Peak Class II	1	0	5.4	0.8	3	1	12.04	1.83	10	4	28.5	5.4	0	0	1.2	0.3
Crow IR Class II	79	22	38.5	19.9	120	49	47.02	25.25	323	229	92.2	59.3	0	0	4.7	1.8
Devils Tower NM Class II	0	0	1.1	0.5	0	0	2.45	1.16	1	0	5.6	1.9	0	0	0.4	0.3
Fort Belknap IR Class II	0	0	0.7	0.1	0	0	1.52	0.30	0	0	2.8	0.5	0	0	0.7	0.4
Fort Laramie NHS Class II	0	0	0.4	0.2	0	0	0.95	0.49	0	0	1.6	1.0	0	0	0.3	0.2
Jedediah Smith W Class II	0	0	0.3	0.1	0	0	0.65	0.20	0	0	1.2	0.4	0	0	0.2	0.1
Jewel Cave NM Class II	0	0	0.7	0.3	0	0	1.68	0.65	0	0	2.9	1.4	0	0	0.3	0.1
Lee Metcalf W Class II	0	0	0.6	0.1	0	0	1.43	0.27	0	0	2.7	0.5	0	0	0.7	0.2
Mt Naomi W Class II	0	0	0.2	0.0	0	0	0.44	0.07	0	0	1.0	0.1	0	0	0.1	0.0
Mt Rushmore Class II	0	0	0.7	0.3	0	0	1.52	0.77	0	0	2.6	1.5	0	0	0.3	0.2
Popo Agie W Class II	0	0	0.7	0.2	0	0	1.51	0.55	0	0	4.3	1.1	0	0	0.4	0.2
Soldier Creek WA Class II	0	0	0.5	0.2	0	0	1.10	0.54	0	0	2.2	1.2	0	0	0.3	0.1
Wellsville Mountain W Class II	0	0	0.2	0.0	0	0	0.40	0.05	0	0	0.9	0.1	0	0	0.1	0.0
Wind River IR Class II	0	0	1.0	0.5	0	0	2.22	1.11	0	0	4.4	2.1	0	0	1.2	0.6
CLASS I AREAS - Receptors within 1-km excluded																
North Cheyenne IR Class I	1	0	5.0	2.6	7	0	7.59	4.9	281	136	62.7	37.4	0	0	0.8	0.6
SENSITIVE CLASS II AREAS - Receptors within 1-km excluded																
Crow IR Class II	7	0	6.7	4.9	38	3	10.57	8.3	299	165	60.4	37.1	0	0	4.7	1.8

Table C-18 Visibility -Method 6 and Monthly f(RH) Values - Alternative H Revised- Scenario 2A

Receptor Set	MTOG RFD Operation - ALT H revised				MTOG RFFA Construction and Operation - ALT H revised				All MT Sources - ALT H revised				All Sources - ALT H revised			
	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}	Number of Days > N% Change in B_{ext}		Maximum % Change in B_{ext}	8th Highest % Change in B_{ext}
	5%	10%			5%	10%			5%	10%			5%	10%		
CLASS I AREAS																
Badlands NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	81	32	32.71	18.14	281	217	229.39	124.01
Bob Marshall W Class I	0	0	0.0	0.0	0	0	0.0	0.0	34	23	57.79	32.16	46	28	59.39	42.03
Bridger W Class I	0	0	0.0	0.0	0	0	0.0	0.0	42	21	54.28	21.79	225	146	449.76	151.14
Fitzpatrick W Class I	0	0	0.0	0.0	0	0	0.0	0.0	41	19	61.58	29.02	157	109	311.78	127.39
Fort Peck IR Class I	0	0	0.0	0.0	0	0	0.0	0.0	91	44	33.43	23.19	151	88	168.88	79.82
Gates of the Mountain W Class I	0	0	0.0	0.0	0	0	0.0	0.0	88	57	93.61	56.09	103	69	117.4	90.67
Grand Teton NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	45	24	31.19	17.74	165	92	180.98	75.79
North Absaorka W Class I	0	0	0.1	0.1	0	0	0.0	0.0	99	48	79.09	45.57	159	89	248.26	120.89
North Cheyenne IR Class I	0	0	0.1	0.1	0	0	0.5	0.3	361	310	135.21	73.27	365	334	334.68	150.54
Red Rock Lakes Class I	0	0	0.0	0.0	0	0	0.0	0.0	52	24	42.07	19.30	99	50	91.34	52.03
Scapegoat W Class I	0	0	0.0	0.0	0	0	0.0	0.0	59	38	112.64	45.15	68	48	112.68	66.23
Teton W Class I	0	0	0.1	0.0	0	0	0.0	0.0	63	22	74.82	30.13	154	92	262.03	118.26
Theodore Roosevelt NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	111	54	71.62	31.09	231	168	355.76	135.96
UL Bend W Class I	0	0	0.1	0.0	0	0	0.0	0.0	140	63	55.98	28.98	176	98	147.55	58.84
Washakie W Class I	0	0	0.2	0.1	0	0	0.0	0.0	92	46	95.15	56.04	177	114	359.78	150.77
Wind Cave NP Class I	0	0	0.0	0.0	0	0	0.0	0.0	96	42	29.69	21.23	324	260	269.94	146.38
Yellowstone NP Class I	0	0	0.1	0.0	0	0	0.0	0.0	114	53	83.01	36.98	193	105	218.62	95.51
SENSITIVE CLASS II AREAS																
Absaorka Beartooth W Class II	0	0	0.1	0.0	0	0	0.1	0.0	181	111	172.02	57.64	212	135	290.66	124.16
Agate Fossil Beds NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	75	23	28.25	16.76	297	236	395.63	131.19
Big Horn Canyon NRA Class II	0	0	0.1	0.0	0	0	1.2	0.5	254	207	1685.72	621.10	357	313	1693.80	637.41
Black Elk W Class II	0	0	0.0	0.0	0	0	0.0	0.0	91	38	30.58	21.09	315	230	266.98	148.92
Cloud Peak Class II	0	0	0.0	0.0	0	0	0.1	0.0	120	63	77.58	30.19	215	144	235.05	158.47
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.5	649.94	365	365	1003.39	662.84
Devils Tower NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	119	60	40.40	24.63	326	277	275.27	132.86
Fort Belknap IR Class II	0	0	0.0	0.0	0	0	0.0	0.0	138	66	51.63	36.87	172	92	138.42	53.2
Fort Laramie NHS Class II	0	0	0.0	0.0	0	0	0.0	0.0	69	21	27.95	17.14	296	248	533.66	147.07
Jedediah Smith W Class II	0	0	0.0	0.0	0	0	0.0	0.0	49	26	31.58	14.72	168	94	172.91	66.09
Jewel Cave NM Class II	0	0	0.0	0.0	0	0	0.0	0.0	94	42	30.47	23.23	317	251	289.69	140.65
Lee Metcalf W Class II	0	0	0.0	0.0	0	0	0.0	0.0	147	95	116.31	41.50	175	112	147.53	59.9
Mt Naomi W Class II	0	0	0.0	0.0	0	0	0.0	0.0	6	1	16.2	3.31	80	52	197.58	69.95
Mt Rushmore Class II	0	0	0.0	0.0	0	0	0.0	0.0	88	37	29.56	21.32	309	219	257.57	146.25
Popo Agie W Class II	0	0	0.0	0.0	0	0	0.0	0.0	40	23	55.26	20.86	211	137	495.32	162.29
Soldier Creek WA Class II	0	0	0.0	0.0	0	0	0.0	0.0	81	32	30.46	18.95	299	245	391.66	123.88
Wellsville Mountain W Class II	0	0	0.0	0.0	0	0	0.0	0.0	2	1	11.29	2.63	64	40	160.99	56.24
Wind River IR Class II	0	0	0.1	0.0	0	0	0.0	0.0	107	54	94.56	51.48	310	243	558.79	213.96
CLASS I AREAS - Receptors wi hin 1-km excluded																
North Cheyenne IR Class I	0	0	0.1	0.0	0	0	0.5	0.3	354	257	135.21	60.8	364	310	334.68	150.5
SENSITIVE CLASS II AREAS - F eceptors within 1-km excluded																
Crow IR Class II	0	0	0.7	0.2	1	0	6.0	1.3	365	365	999.50	649.9	365	365	1003.39	662.8

MILES CITY FIELD OFFICE

Supplemental Air Quality Analysis

APPENDIX D
MAPS

APPENDIX D

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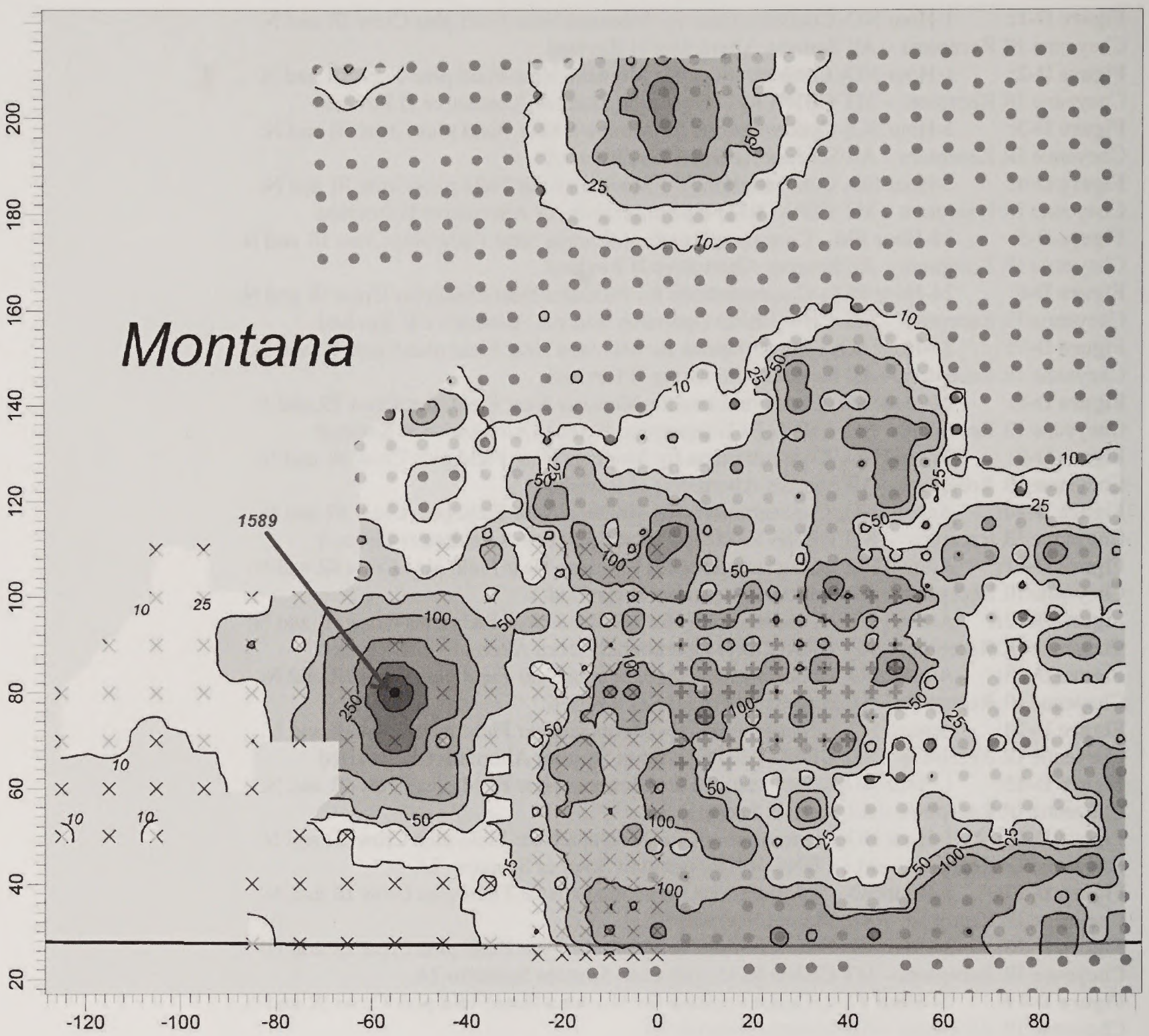
PROJECT TITLE:

1-Hour NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF MAXIMUM 1-HOUR VALUES FOR SOURCE GROUP: ALL

ug/m^3

10 25 50 100 250 500 1000 1500

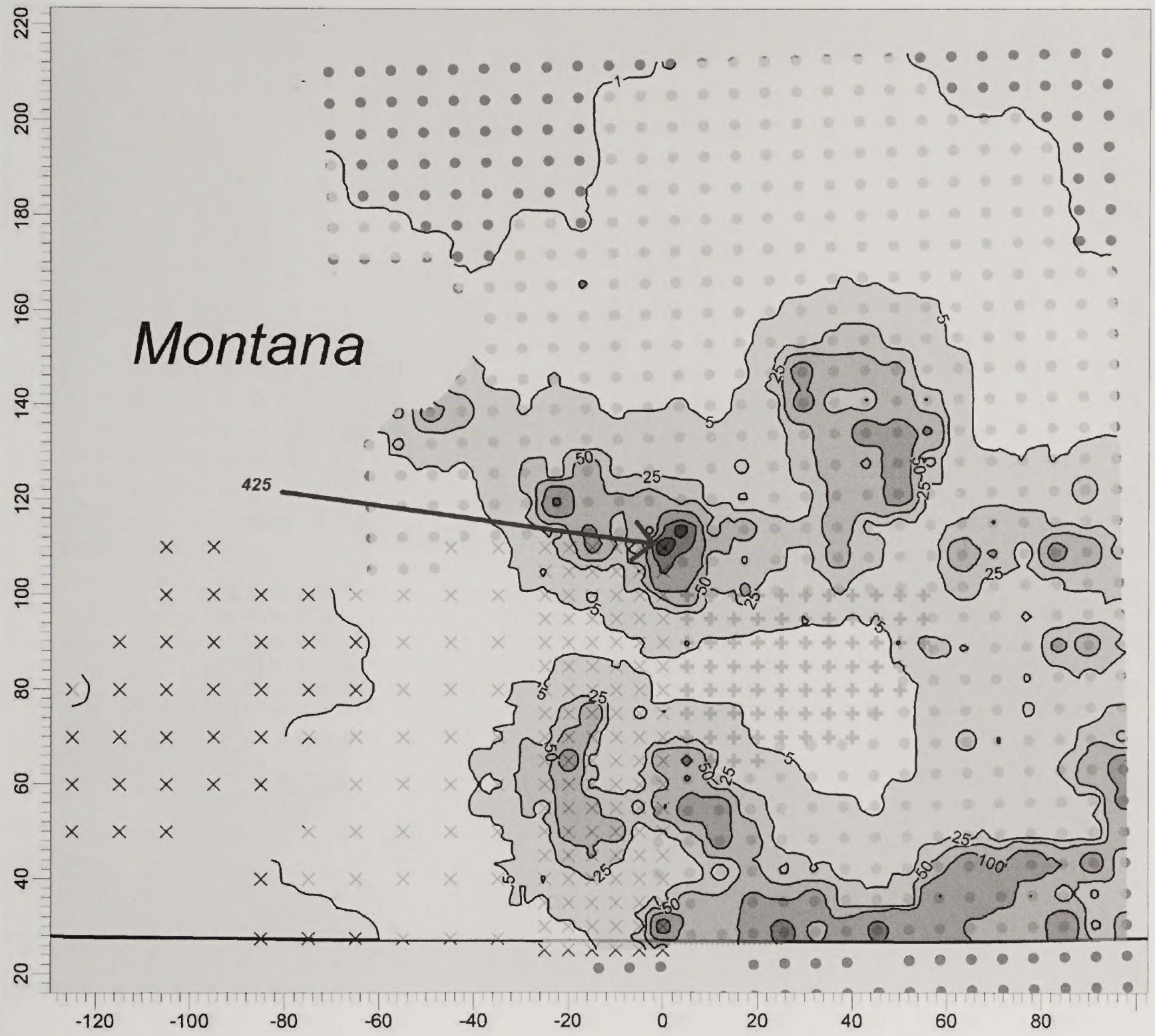
COMMENTS: * Assume 75% NOx to NO2 conversion.	MODELING OPTIONS: **CONC**	Figure D-1 MODELER:	
	OUTPUT TYPE: **Concentration**	RECEPTORS: **785**	SCALE: 1:1,402 0 40 km
	MAX: **1589.325**	UNITS: **ug/m^3**	DATE: **10/29/2007**
			PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL\Plots\NO2 1hr\NO2_1hr.plt

PROJECT TITLE:

1-Hour NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF MAXIMUM 1-HOUR VALUES FOR SOURCE GROUP: MTCBNG RFD OPER ug/m^3

1 5 25 50 100 200 300 400

COMMENTS:

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

Figure D-2

MODELER:

OUTPUT TYPE:	RECEPTORS:	SCALE: 1:1,415
Concentration	**785**	0 40 km

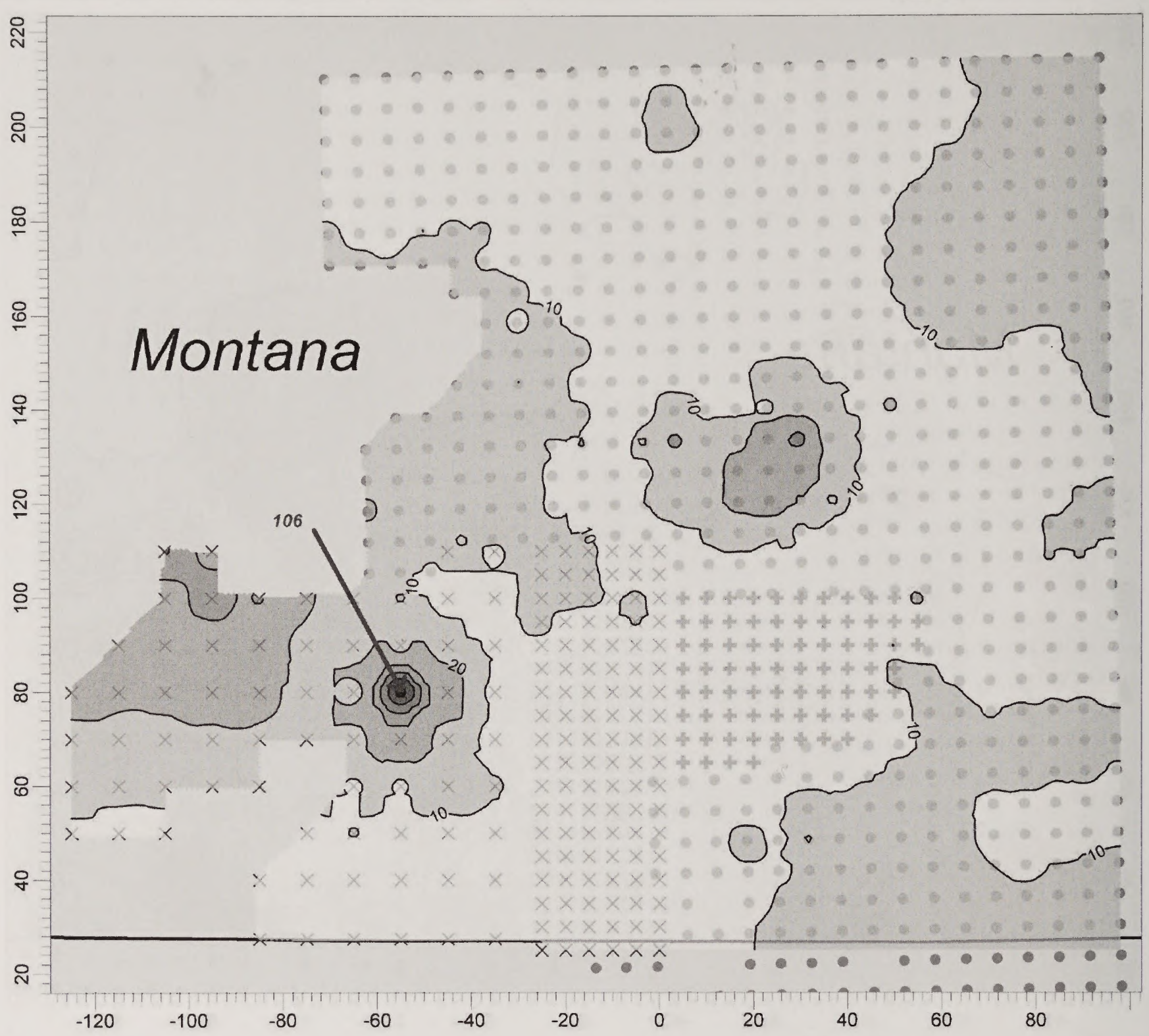
MAX:	UNITS:	DATE:	PROJECT NO.:
425.46	**ug/m^3**	**10/29/2007**	

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\NO2 1hr\NO2_1hr.plt

PROJECT TITLE:

3-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF HIGHEST SECOND-HIGHEST 3-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

5 10 20 40 60 80 100

COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-3	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,415 (0 — 40 km)	
	MAX: **106.38** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

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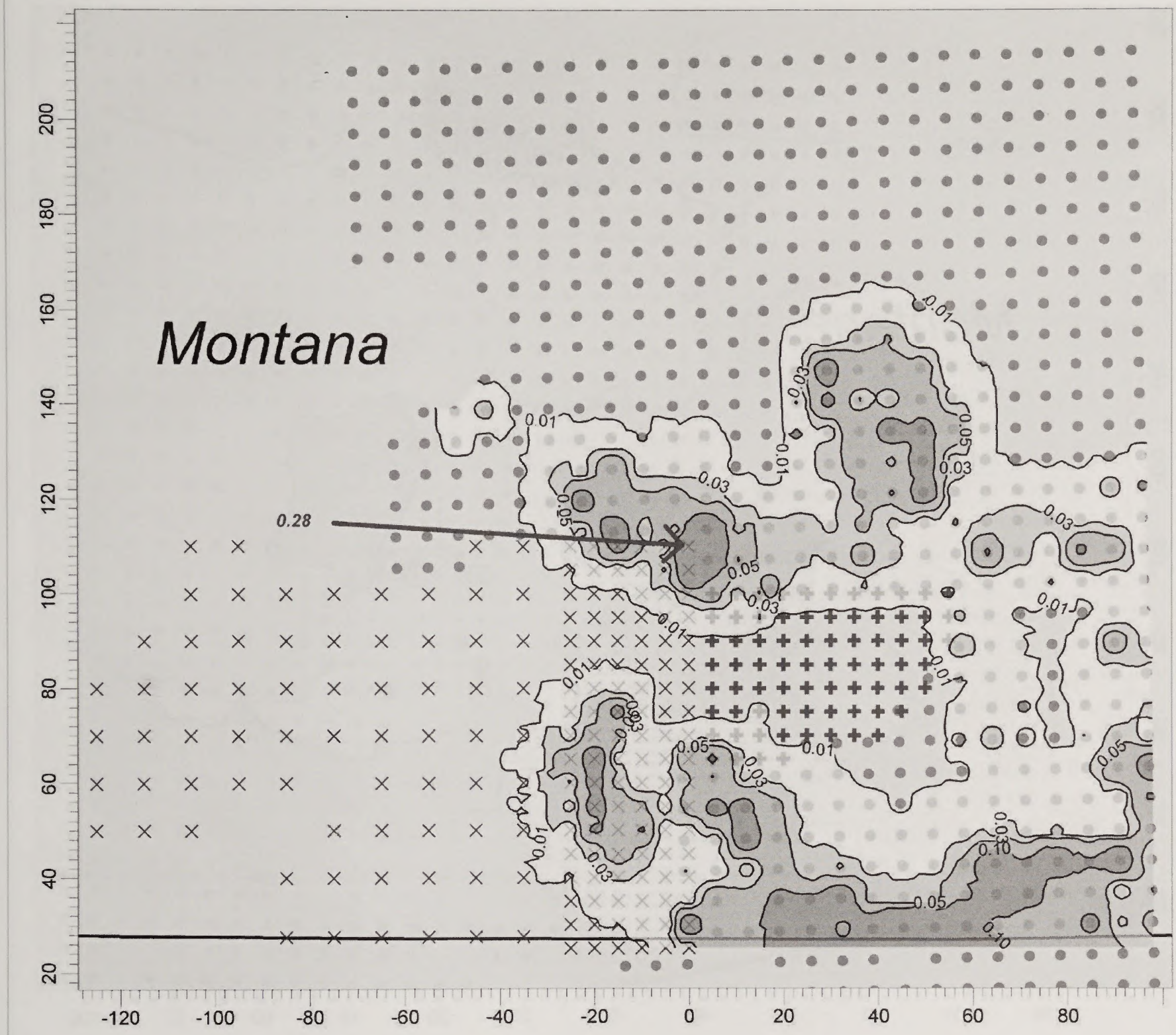
PROJECT TITLE:

3-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF HIGHEST SECOND-HIGHEST 3-HOUR VALUES FOR SOURCE GROUP: MTCBNG RFD OPER ug/m^3

0.01 0.03 0.05 0.10 0.30 0.50 1.00

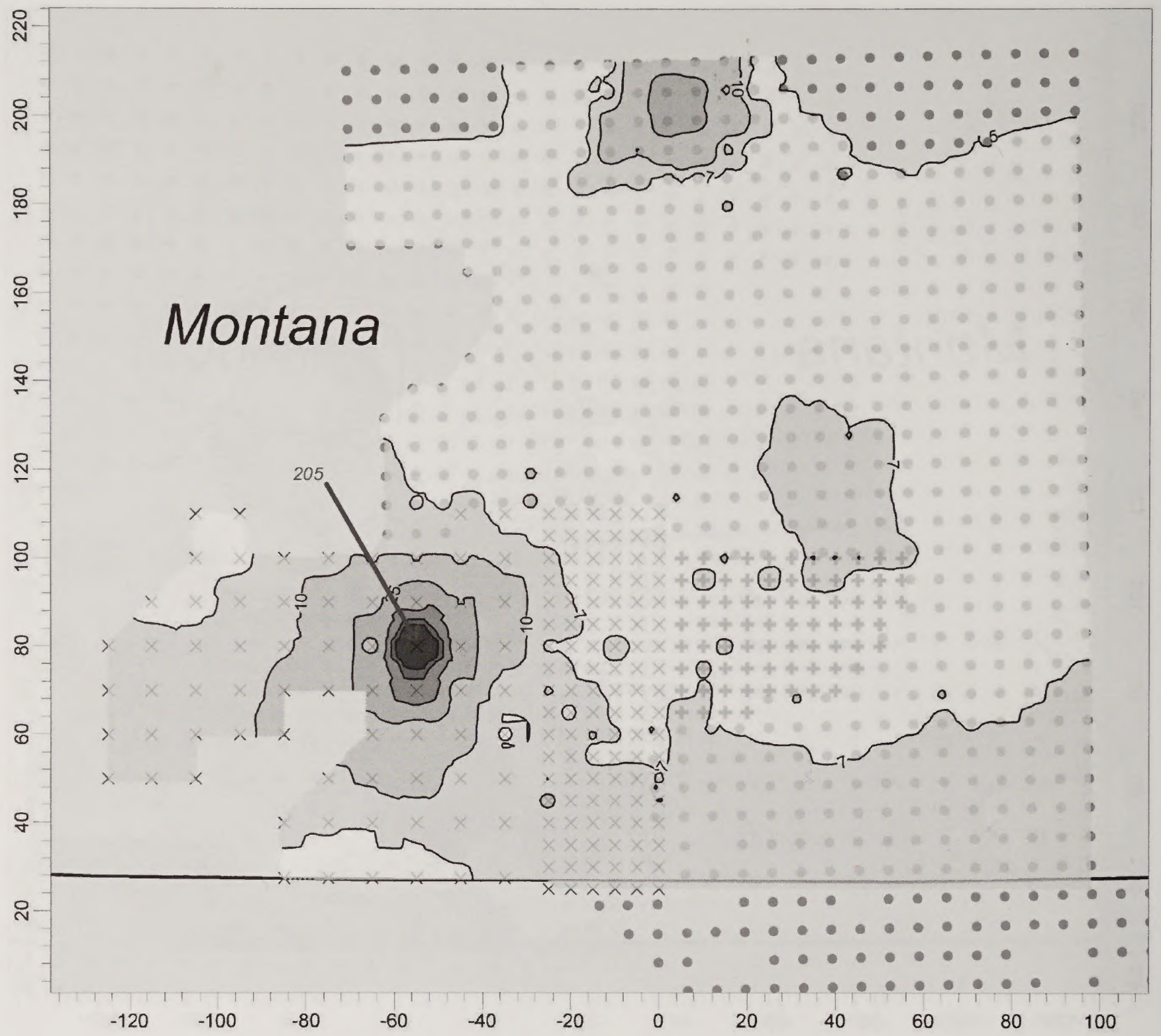
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-4	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,408 (0 — 40 km)	
	MAX: **0.2843** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\SO2 3 hr\SO2_3hr.plt

PROJECT TITLE:

24-Hour PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

5 7 10 25 50 75 100

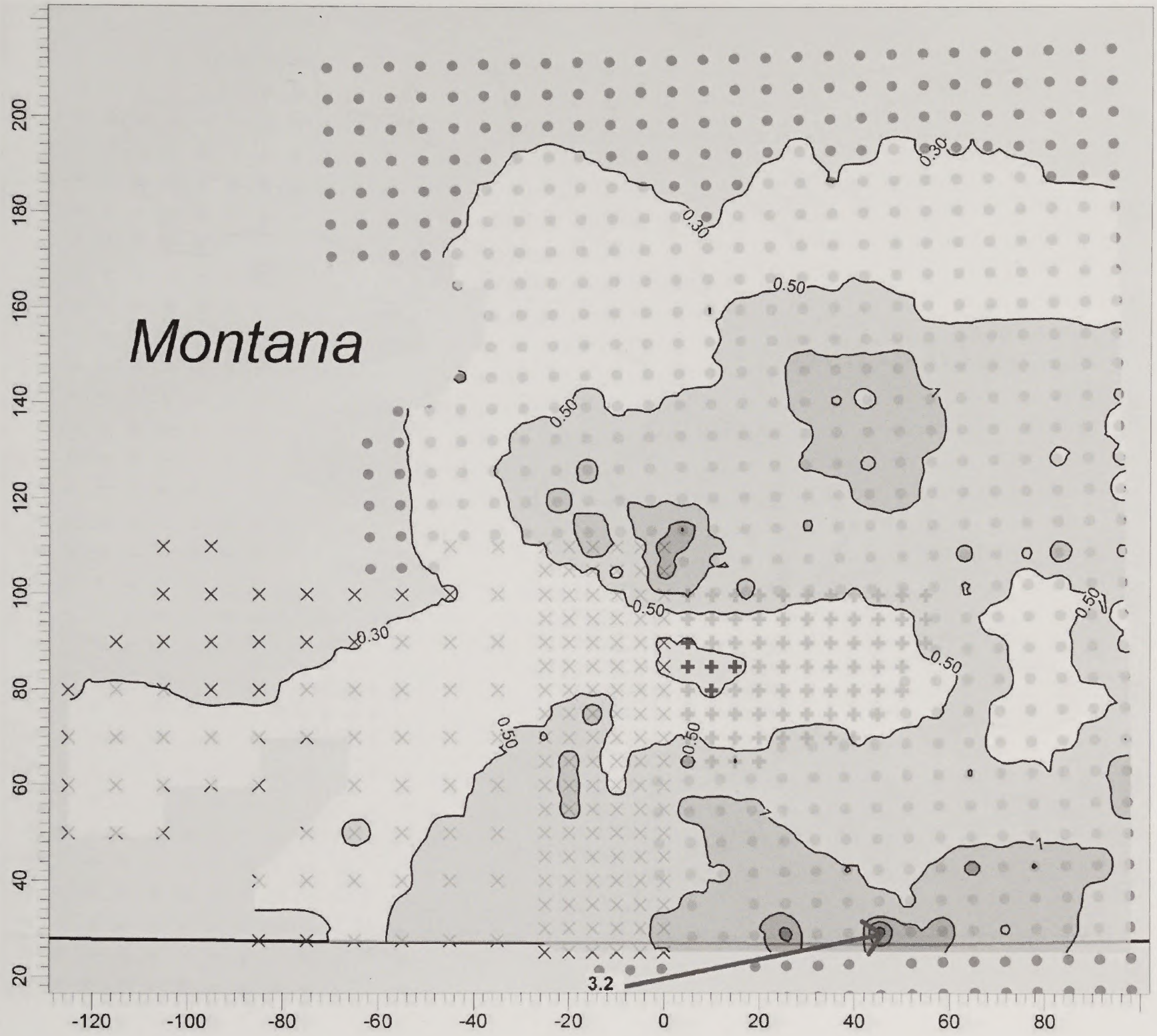
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-5	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,518 (0 — 40 km)	
	MAX: **205.28** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL\Plots\PM10 24 hr\PM10_24hr.plt

PROJECT TITLE:

24-Hour PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: MTCBNG RFD OPER ug/m^3

0.30 0.50 1.00 2.00 2.50 3.00 3.50

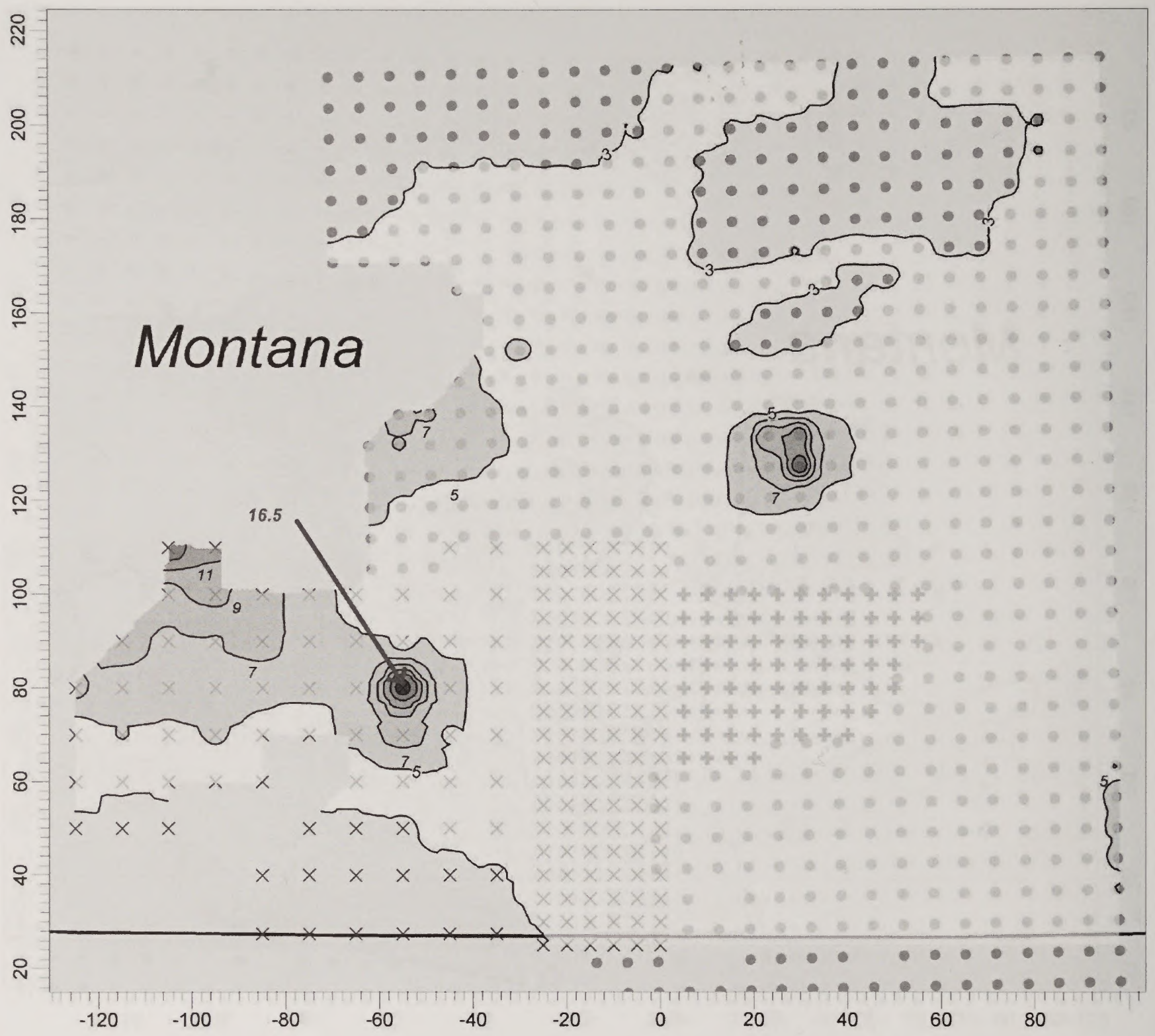
COMMENTS:	MODELING OPTIONS:	Figure D-6	
	CONC	MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,408 (0 — 40 km)	
	MAX: **3.2006** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\PM10 24 hr\PM10_24hr.plt

PROJECT TITLE:

24-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

3 5 7 9 11 13 15

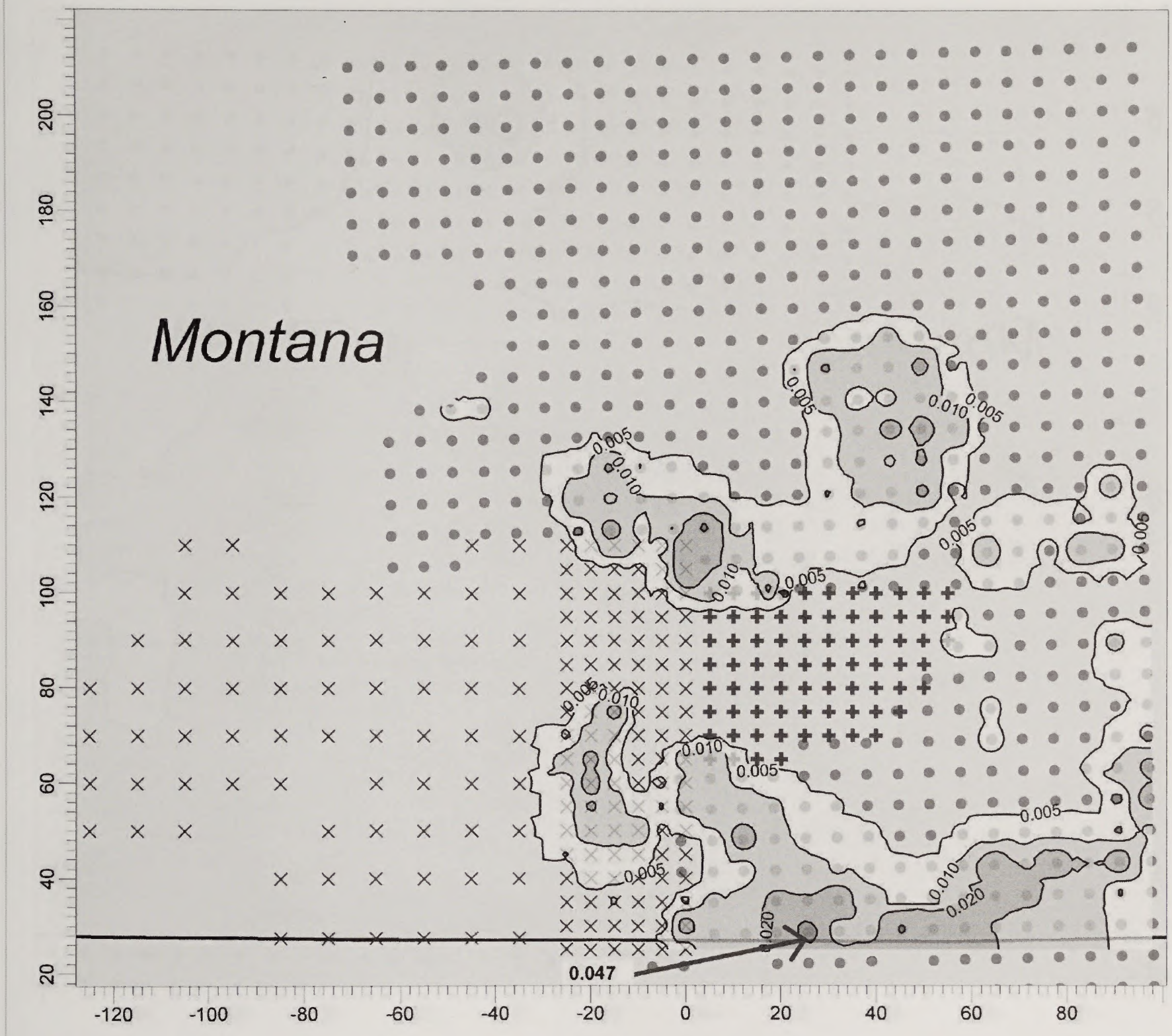
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-7	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,428 (0 — 40 km)	
	MAX: **16.516** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL\Plots\SO2 24 hr\SO2_24hr.plt

PROJECT TITLE:

24-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: MTCBNG RFD OPER ug/m^3

0.005 0.010 0.020 0.040 0.080 0.120 0.160

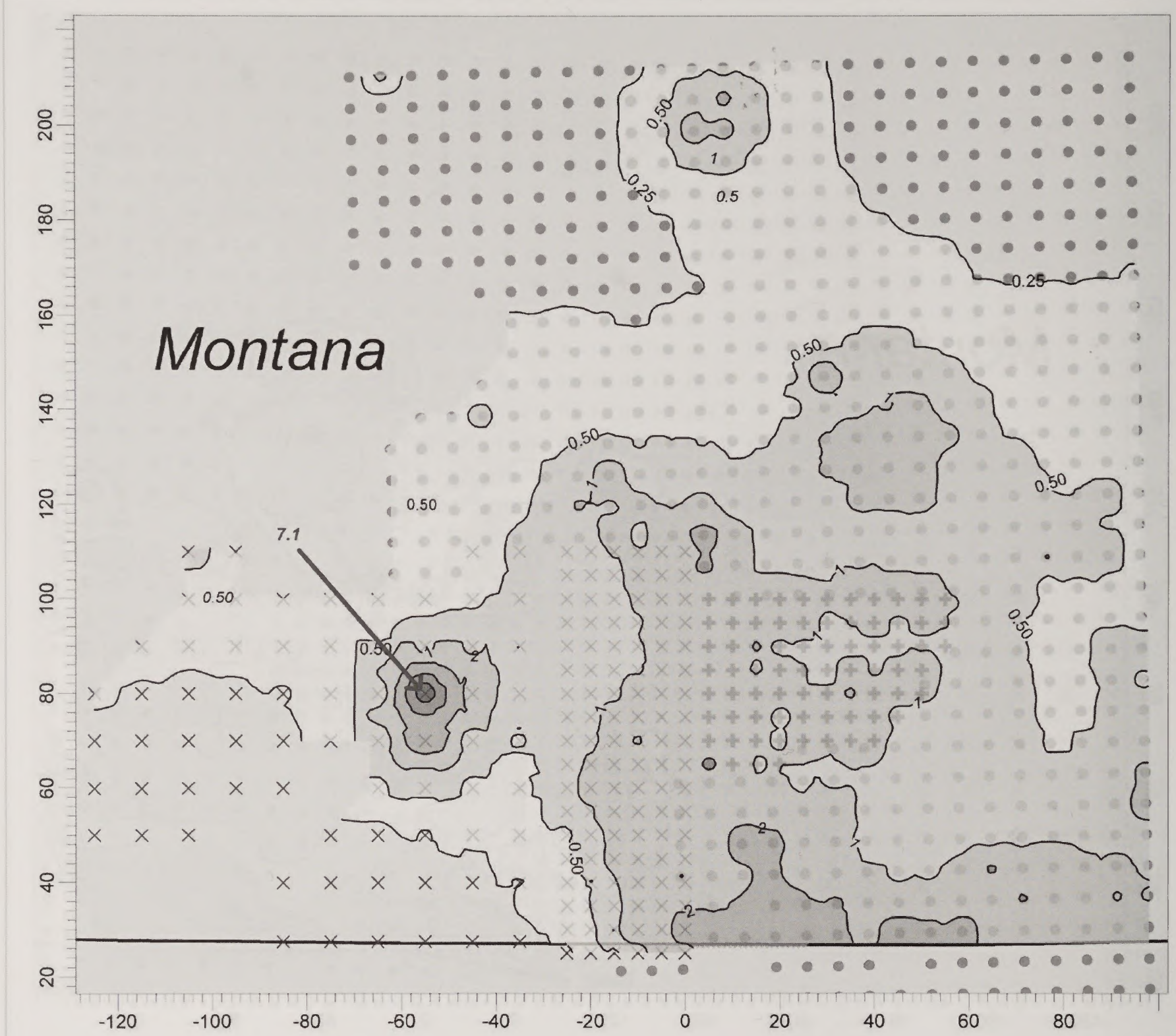
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-8	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,395 (0 — 40 km)	
	MAX: **0.04673** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\SO2 24 hr\SO2_24hr.plt

PROJECT TITLE:

Annual NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
ALL Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL ug/m^3

0.25 0.50 1.00 2.00 4.00 6.00 8.00

COMMENTS:

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

Figure D-9

MODELER:

OUTPUT TYPE:	RECEPTORS:	SCALE: 1:1,402
Concentration	**785**	0 40 km

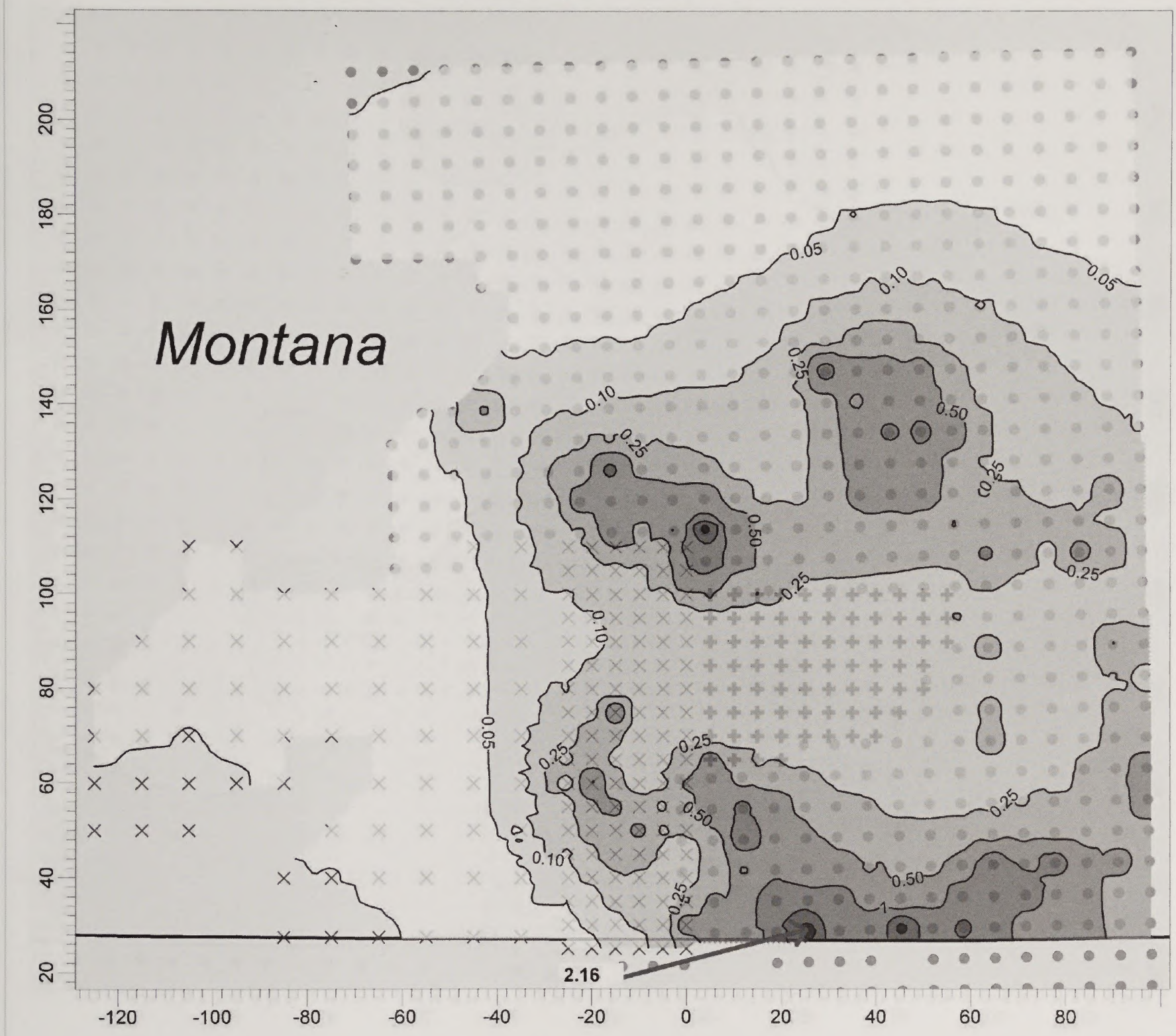
MAX:	UNITS:	DATE:	PROJECT NO.:
7.14675	**ug/m^3**	**10/29/2007**	

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL\Plots\NO2 Ann\NO2_ann.plt

PROJECT TITLE:

Annual NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: MTCBNG RFD OPER

ug/m^3

0.01 0.05 0.10 0.25 0.50 1.00 1.50 2.00

COMMENTS:

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

Figure D-10

MODELER:

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,408 / 40 km

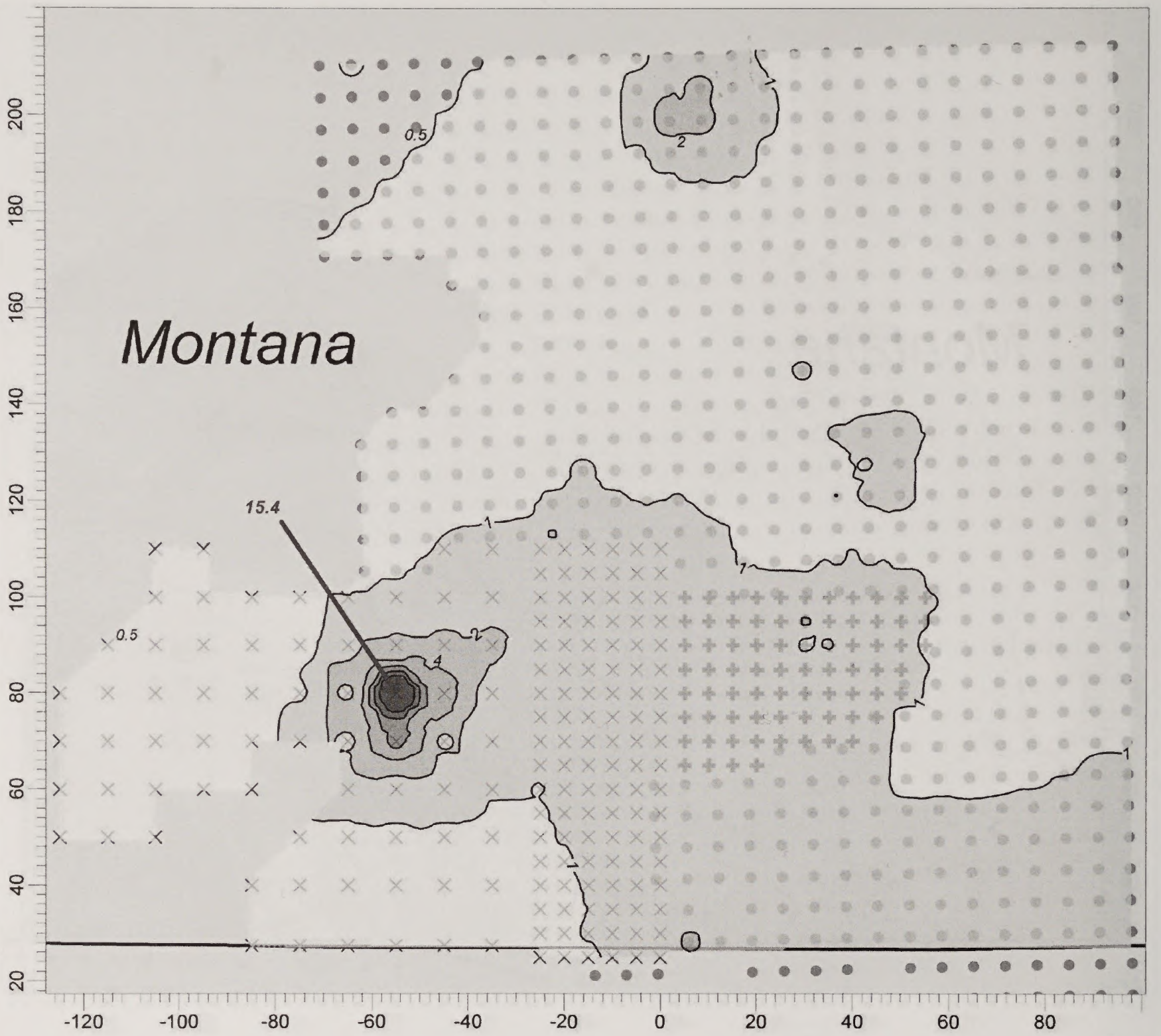
MAX:	UNITS:	DATE:	PROJECT NO.:
2.16488	**ug/m^3**	**10/29/2007**	

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\NO2 Ann\NO2_ann.plt

PROJECT TITLE:

Annual PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
ALL Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

0.50 1.00 2.00 4.00 6.00 8.00 10.00

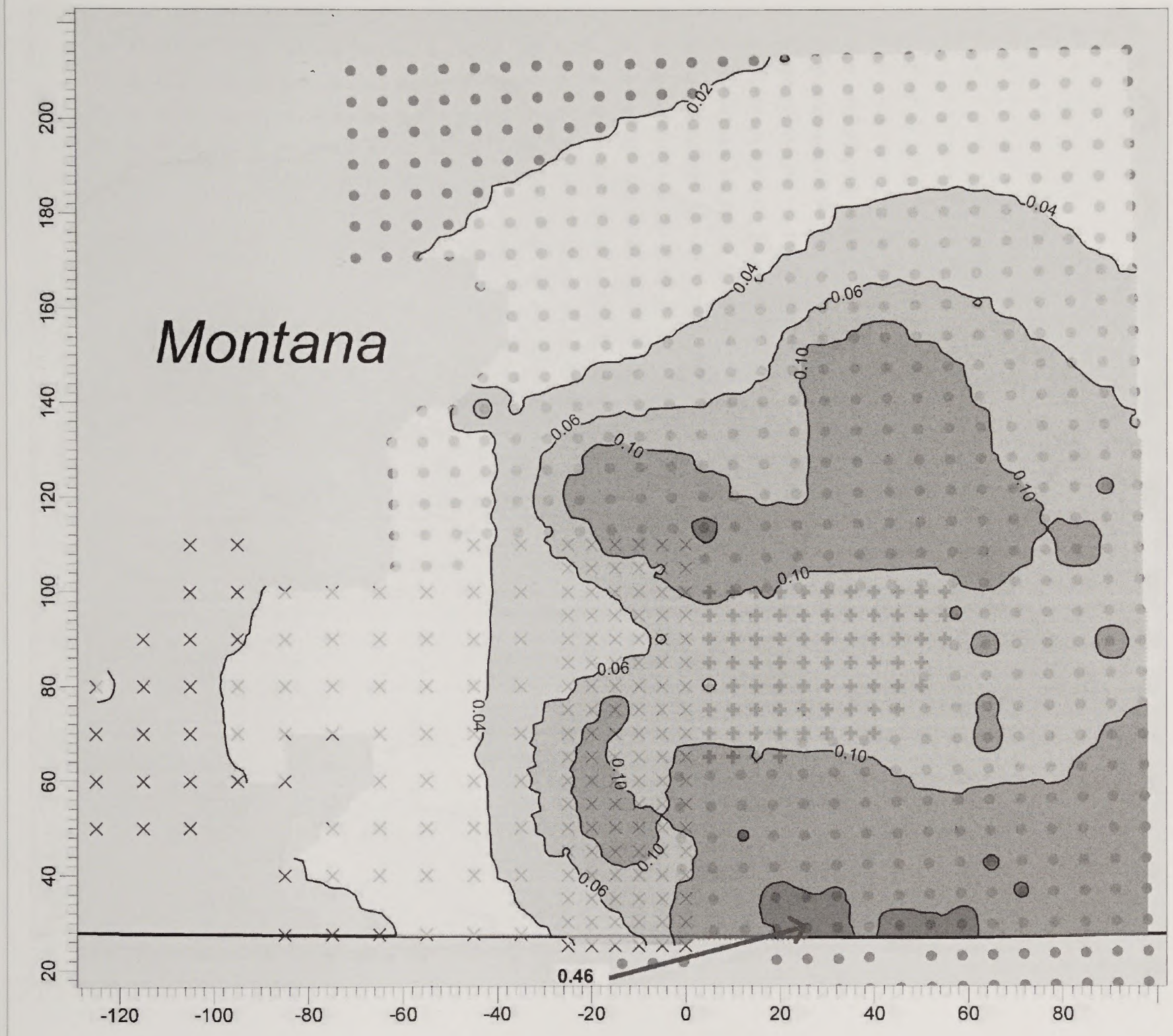
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-11	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,395 (0 — 40 km)	
	MAX: **15.453** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL\Plots\PM10 Ann\PM10_ann.plt

PROJECT TITLE:

Annual PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: MTCBNG RFD OPER ug/m^3

0.02 0.04 0.06 0.10 0.30 0.50

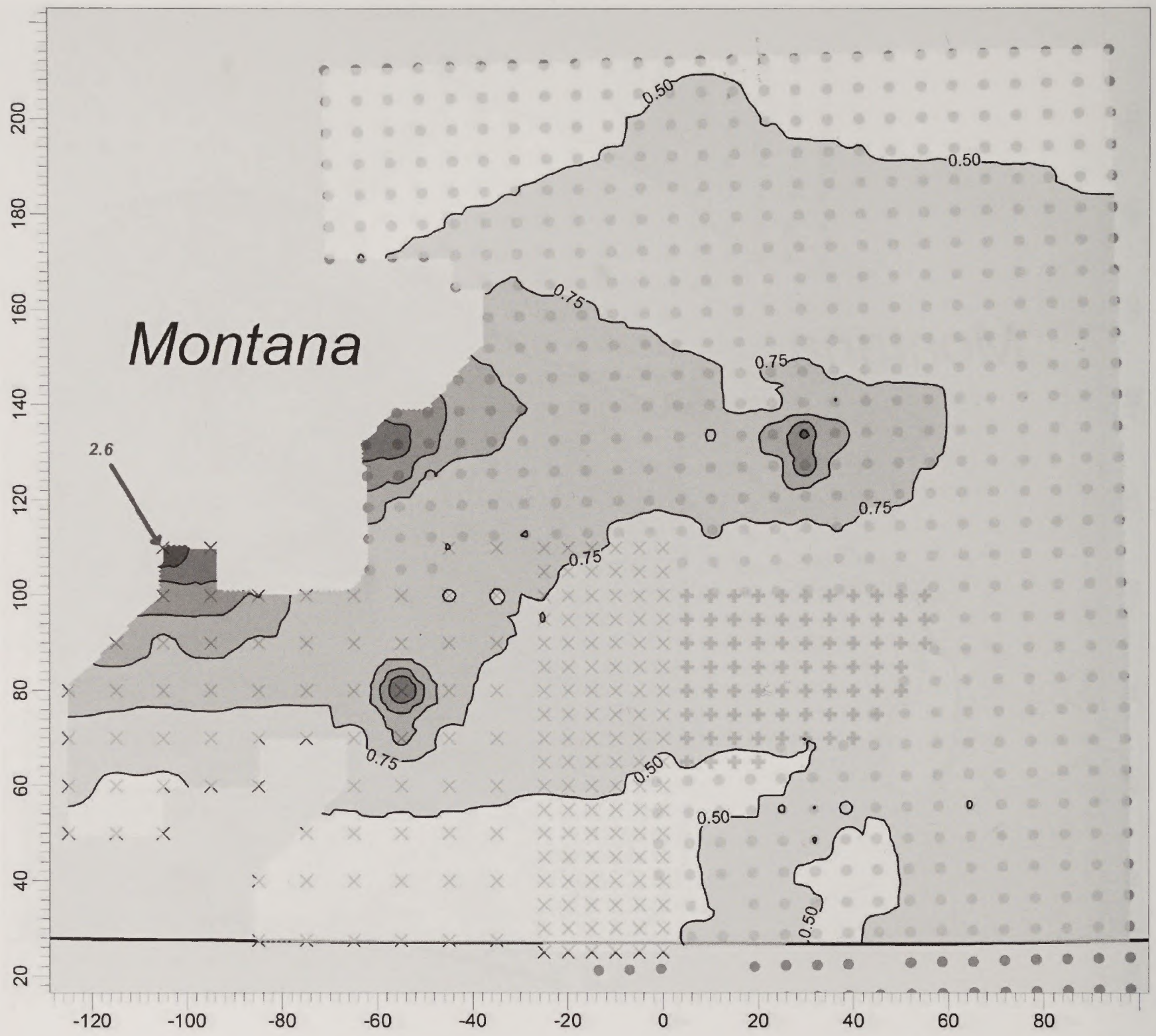
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-12	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,408 (0 — 40 km)	
	MAX: **0.46264** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\PM10 Ann\PM10_ann.plt

PROJECT TITLE:

Annual SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
ALL Sources - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

0.00 0.50 0.75 1.00 1.25 1.50 2.00

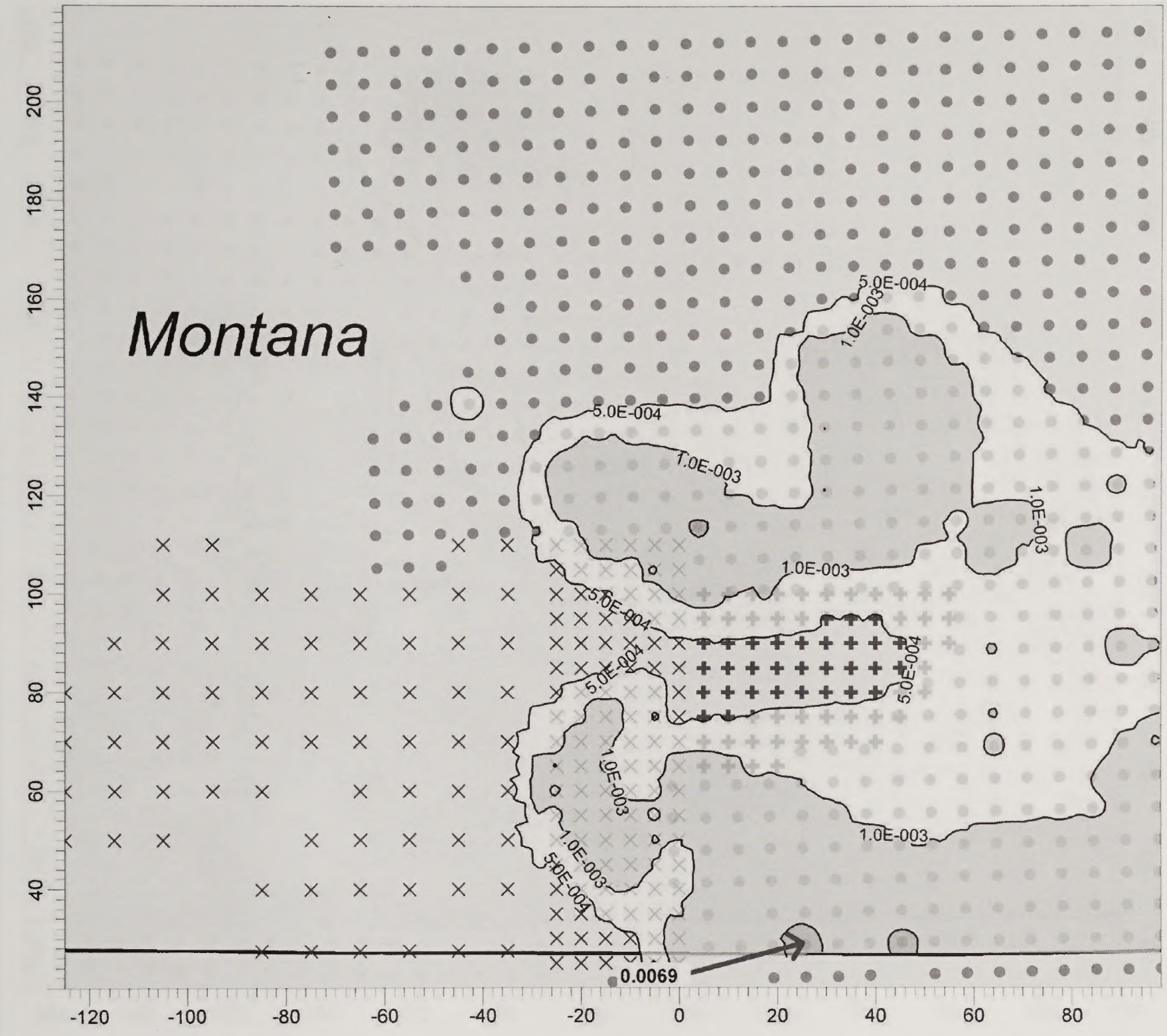
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-13	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,408 (0 — 40 km)	
	MAX: **2.6215** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL\Plots\SO2 Ann\SO2_ann.plt

PROJECT TITLE:

Annual SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation - Alternative H Revised (240:10:1 @ 1.5g/bhp-hr)



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: MTCBNG RFD OPER ug/m^3

5.0E-004 1.0E-003 5.0E-003 1.0E-002 1.5E-002 2.0E-002 2.5E-002

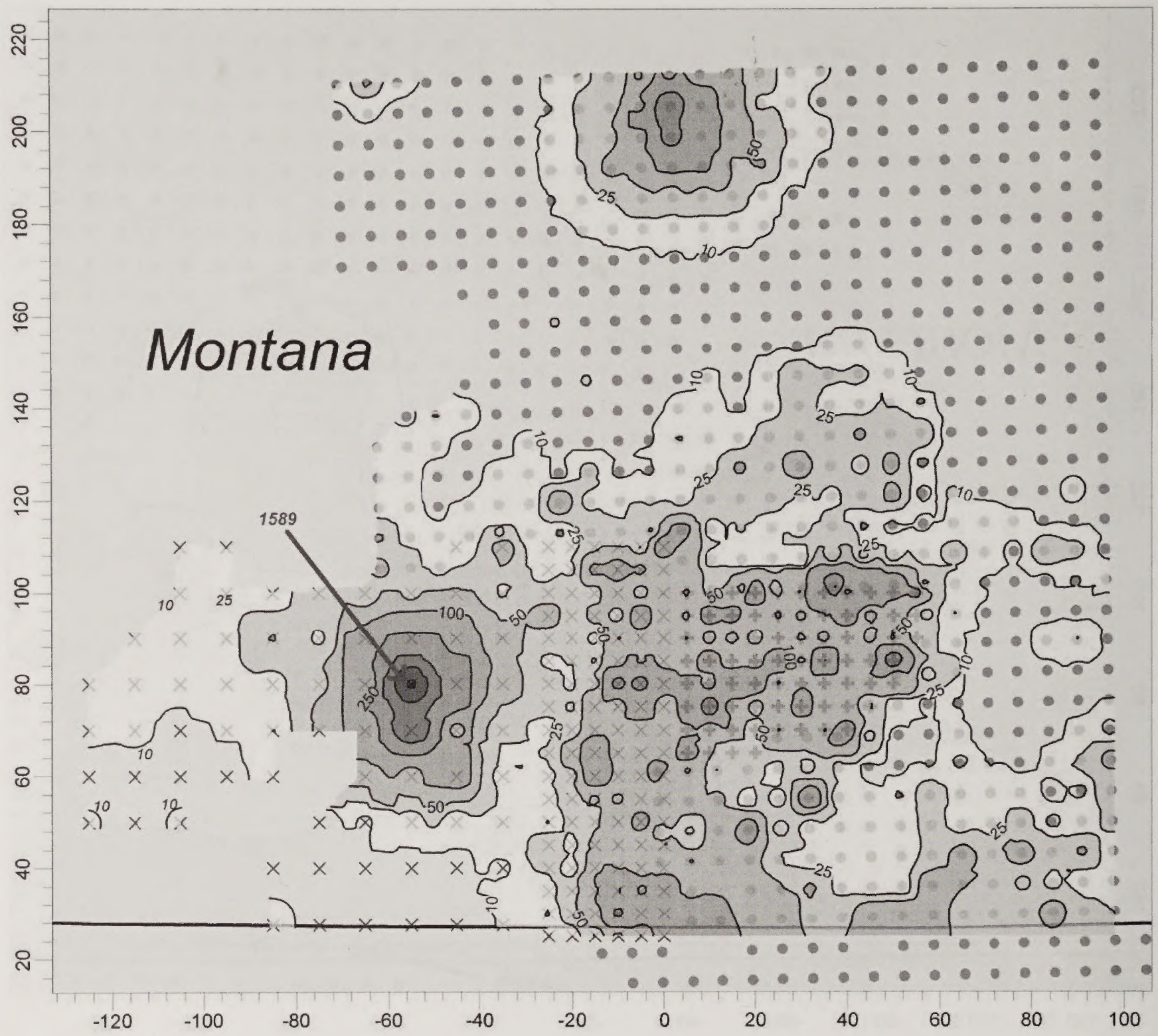
COMMENTS:	MODELING OPTIONS: **CONC**	Figure D-14	
		MODELER:	
	OUTPUT TYPE: **Concentration** / RECEPTORS: **785**	SCALE: 1:1,361 (0 — 40 km)	
	MAX: **0.0069** / UNITS: **ug/m^3**	DATE: **10/29/2007**	PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER\Plots\SO2 Ann\SO2_ann.plt

PROJECT TITLE:

1-Hour NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Scenario 3



PLOT FILE OF MAXIMUM 1-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

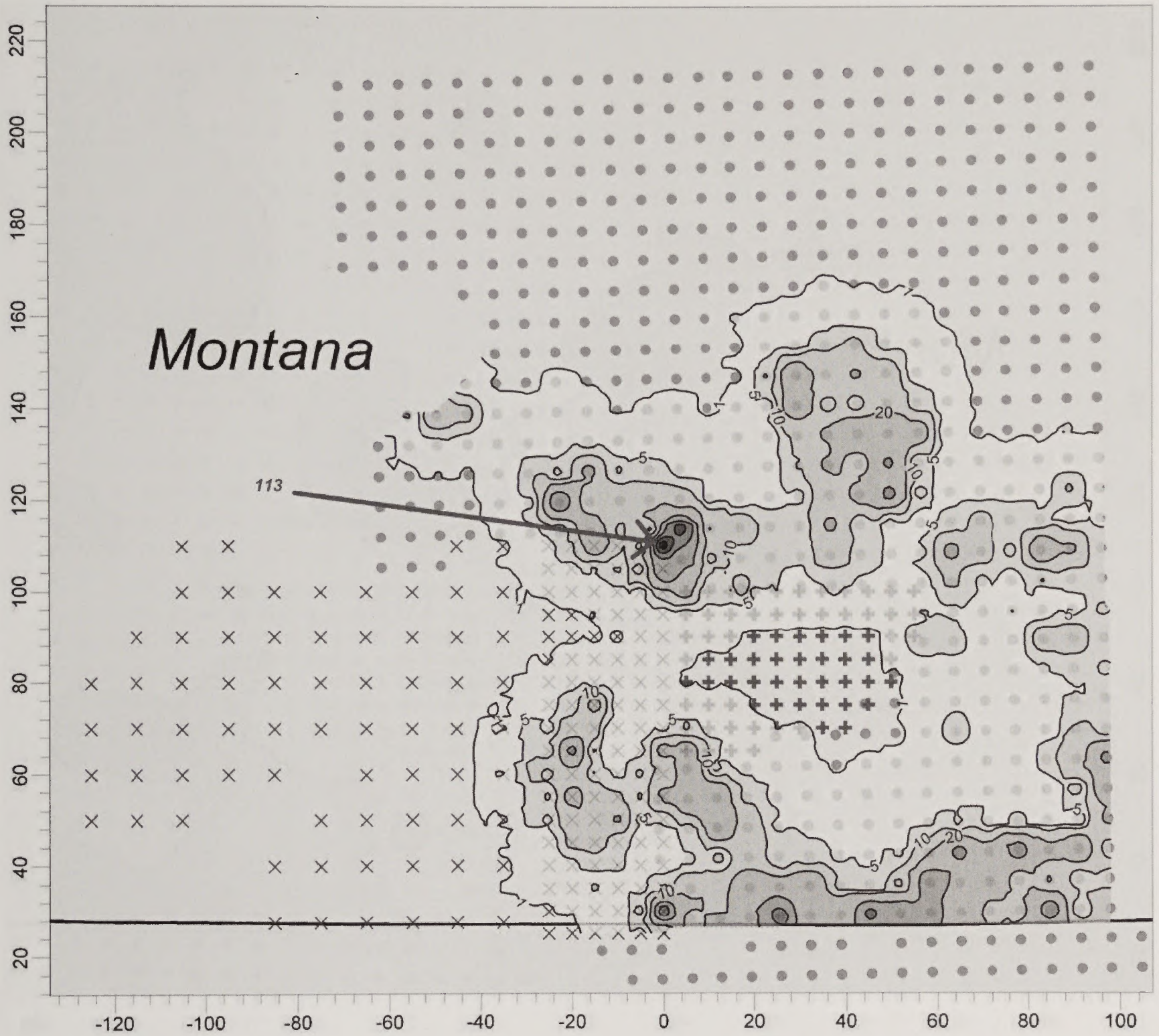
Figure D-15

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,458 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
1589.325	**ug/m^3**	**10/25/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

1-Hour NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources



PLOT FILE OF MAXIMUM 1-HOUR VALUES FOR SOURCE GROUP: MTCBM RFD OPER ug/m^3

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

Figure D-16

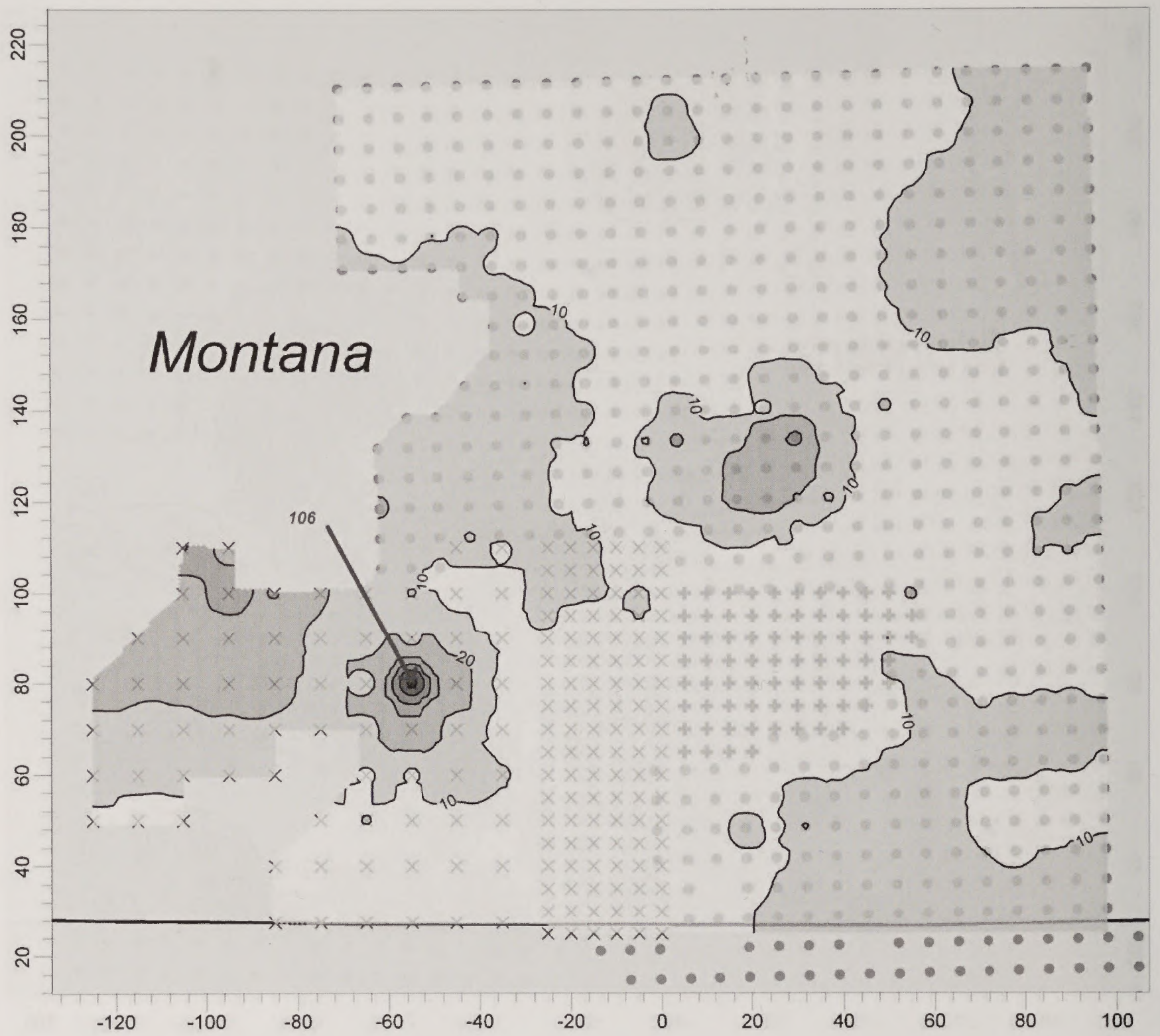
OUTPUT TYPE:	RECEPTORS:	SCALE: 1:1,471
Concentration	**785**	0 — 40 km

MAX:	UNITS:	DATE:	PROJECT NO.:
112.665	**ug/m^3**	**10/25/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

3-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alt H Revised



PLOT FILE OF HIGHEST SECOND-HIGHEST 3-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

5 10 20 40 60 80 100

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

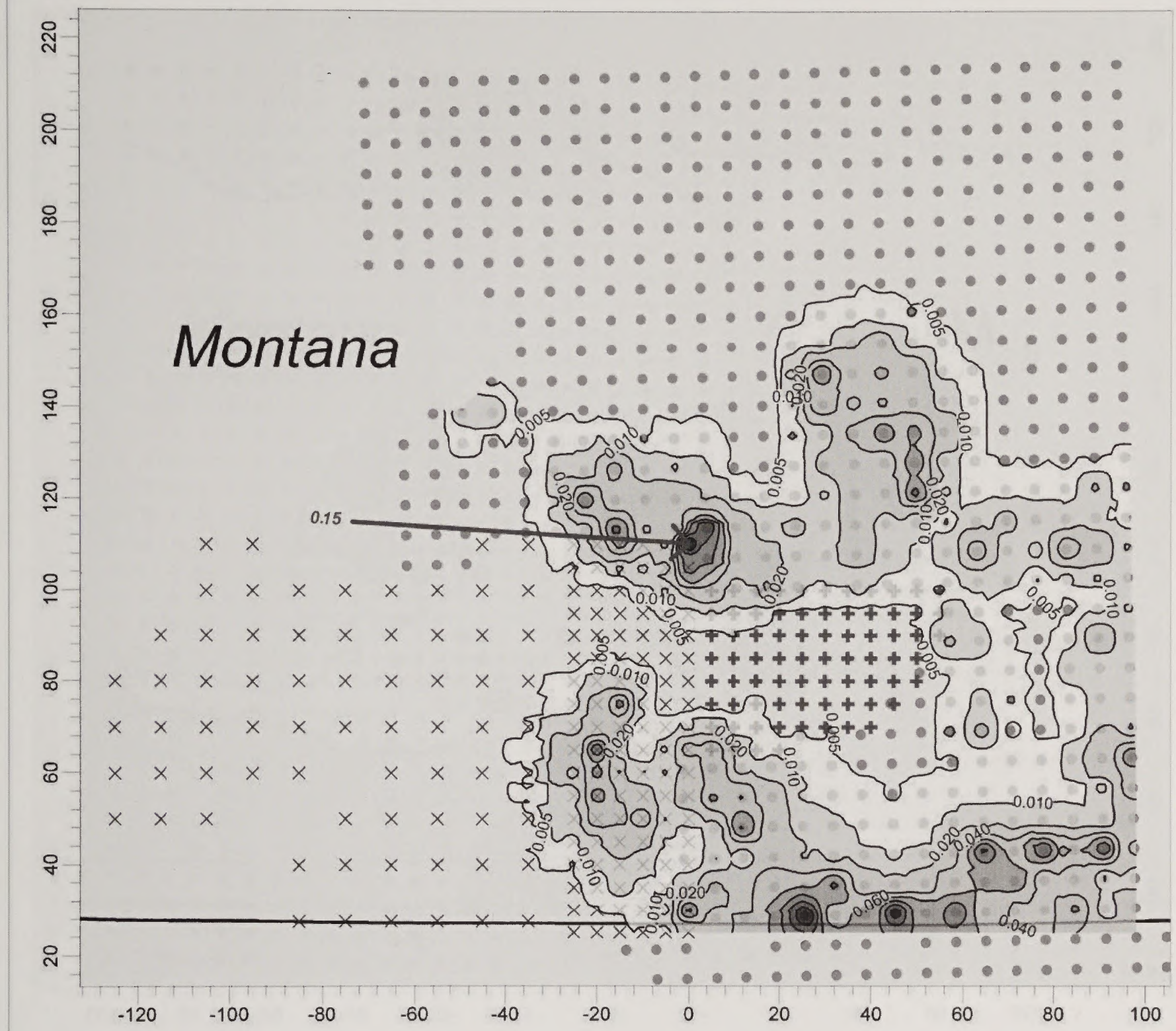
Figure D-17

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,471 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
106.38	**ug/m^3**	**10/15/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

3-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources - Alt H Revised



PLOT FILE OF HIGHEST SECOND-HIGHEST 3-HOUR VALUES FOR SOURCE GROUP: MTCBM RFD OPER ug/m^3

0.005 0.010 0.020 0.040 0.060 0.080 0.100 0.120

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

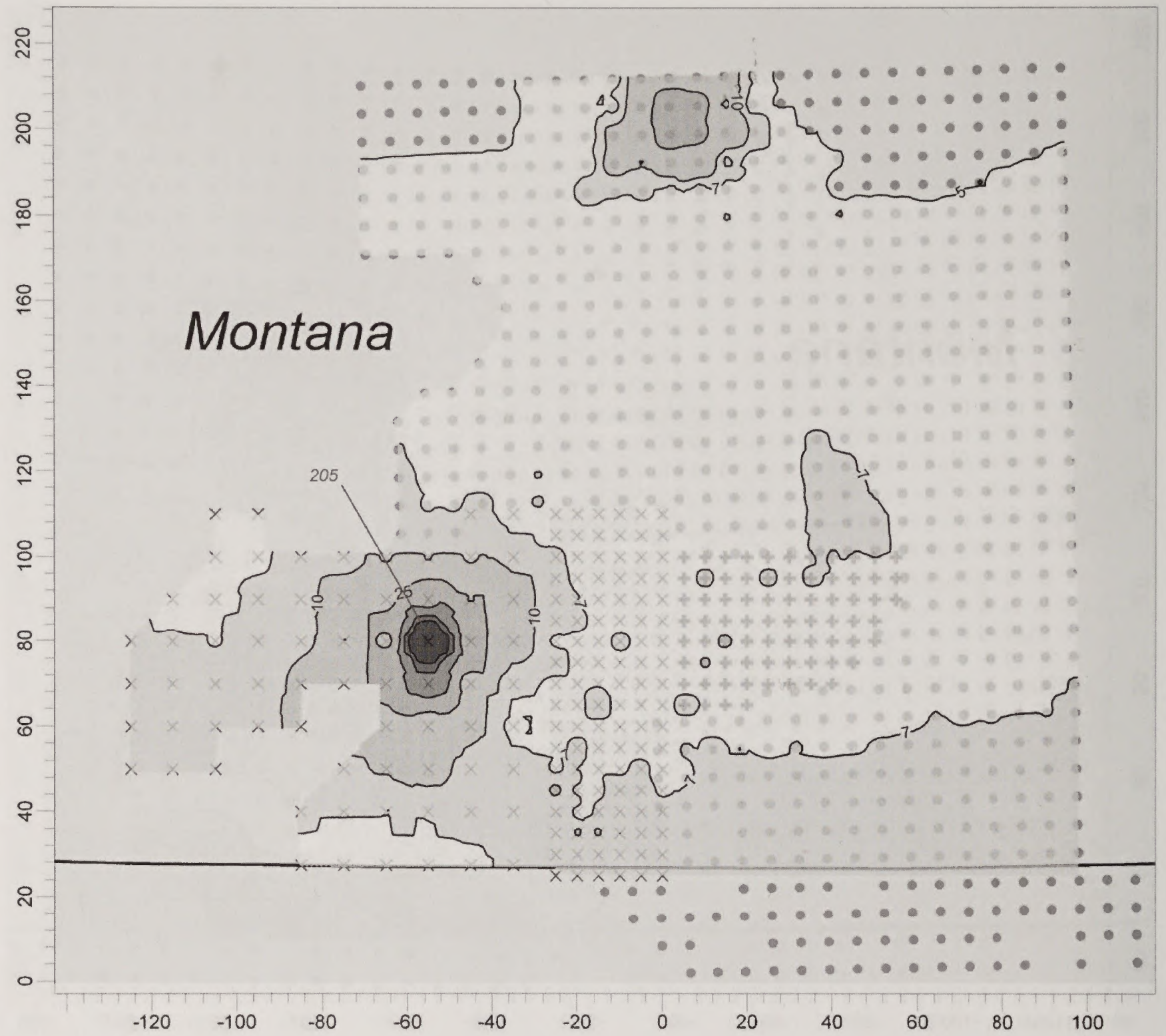
Figure D-18

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,452 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
0.14773	**ug/m^3**	**10/15/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

24-Hour PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alt H Revised



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

5 7 10 25 50 75 100

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

Figure D-19

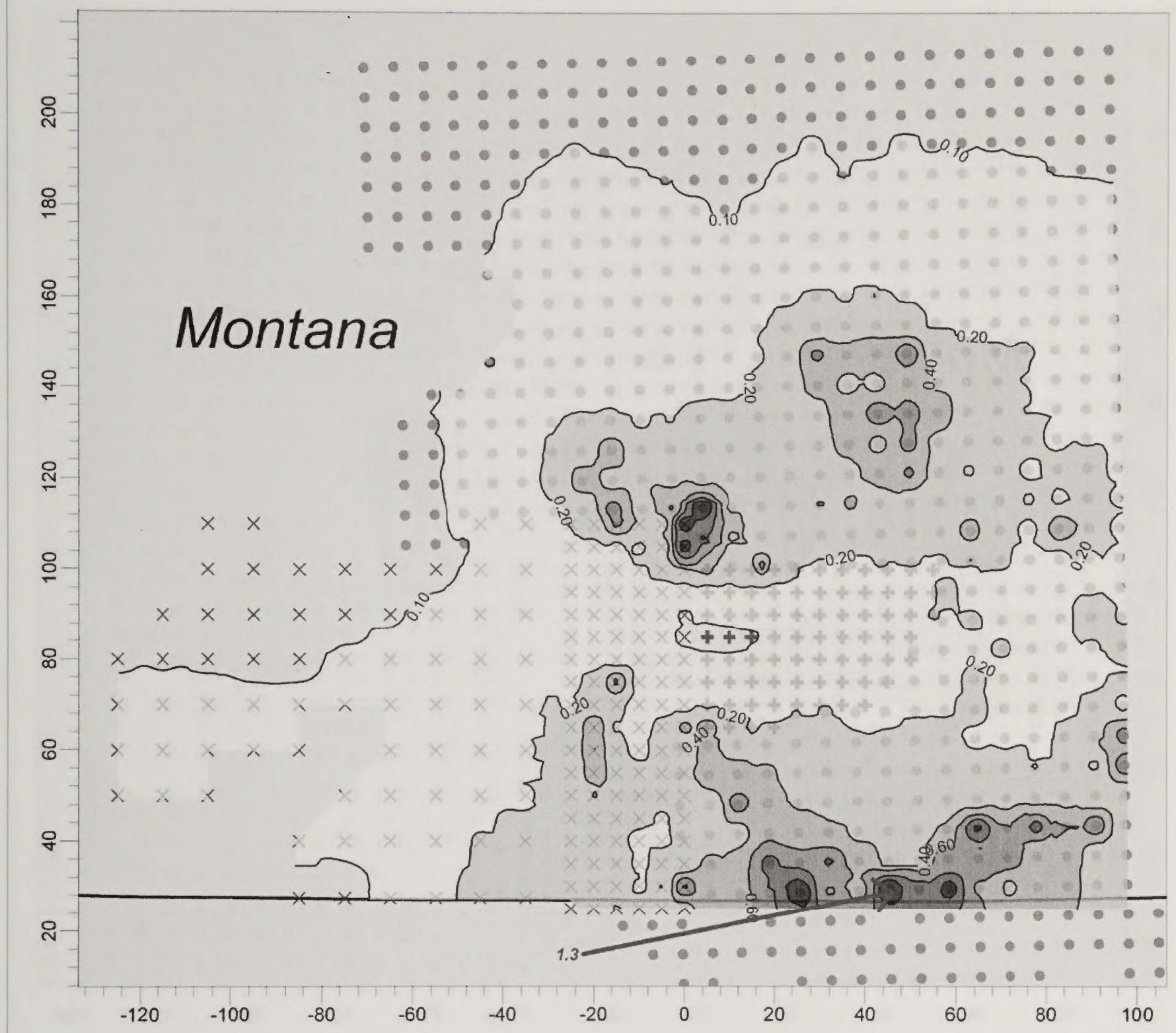
OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,579 / 40 km

MAX:	UNITS:	DATE:	PROJECT NO.:
205.27	**ug/m^3**	**10/12/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

24-Hour PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources - Alt H Revised



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: MTCBM RFD OPER ug/m^3

0.10 0.20 0.40 0.60 0.80 1.00

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

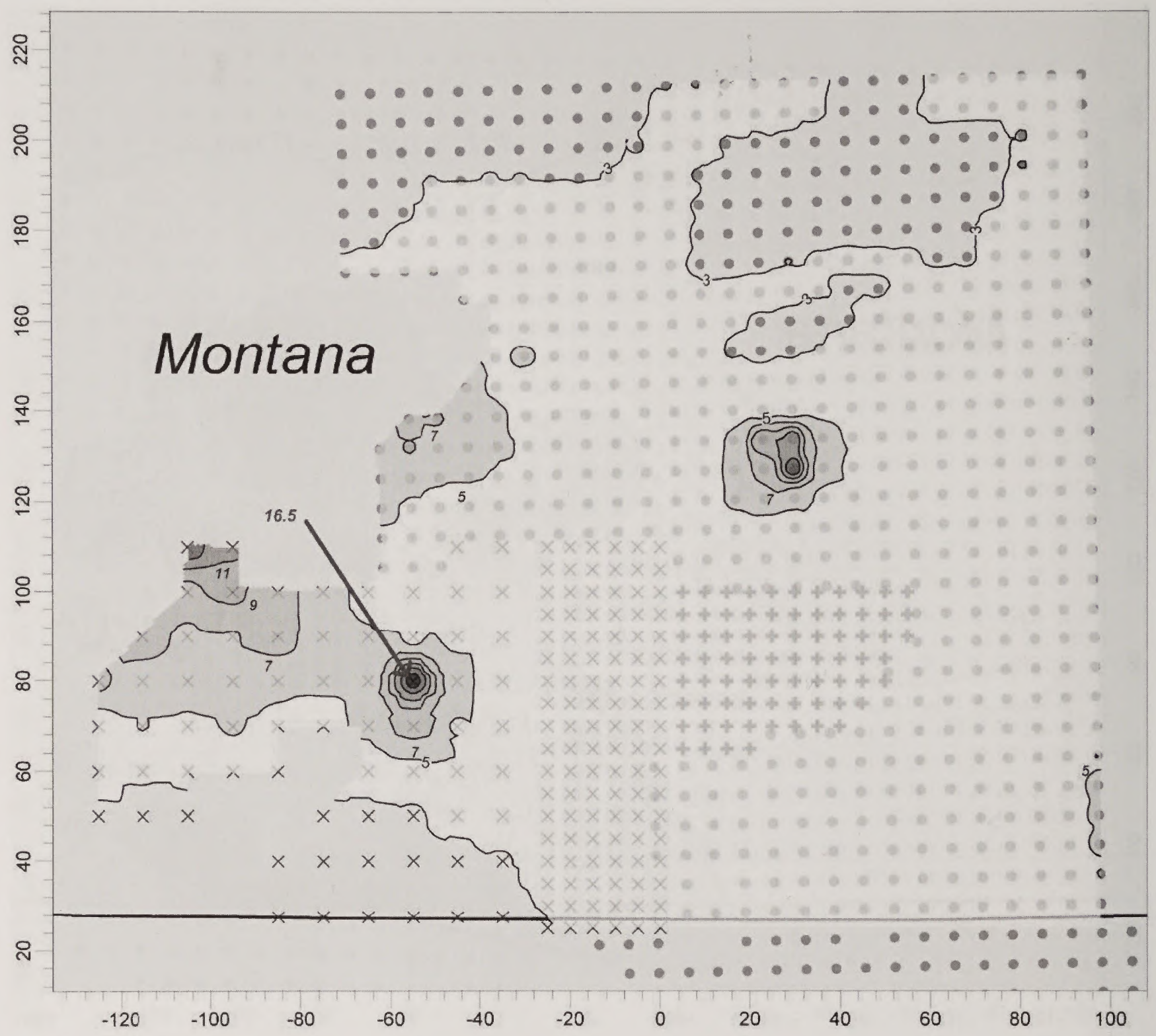
Figure D-20

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,465 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
1.3124	**ug/m^3**	**10/12/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

24-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
All Sources - Alt H Revised



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: ALL ug/m^3

3 5 7 9 11 13 15

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

Figure D-21

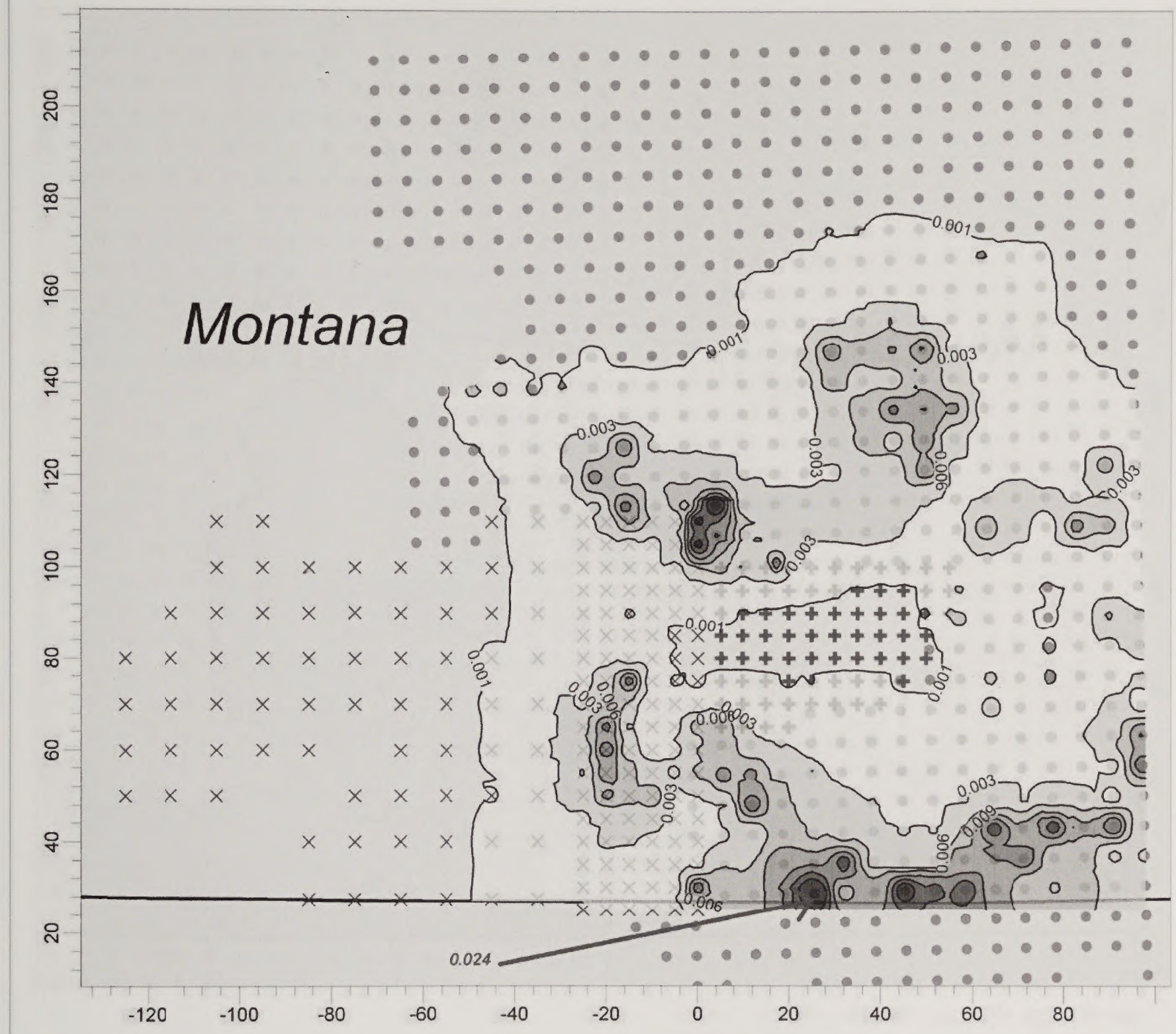
OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,484 / 40 km

MAX:	UNITS:	DATE:	PROJECT NO.:
16.516	**ug/m^3**	**10/15/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

24-Hour SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources - Alt H Revised



PLOT FILE OF HIGHEST SECOND-HIGHEST 24-HOUR VALUES FOR SOURCE GROUP: MTCBM RFD OPER ug/m^3

0.001 0.003 0.006 0.009 0.012 0.015 0.018

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

Figure D-22

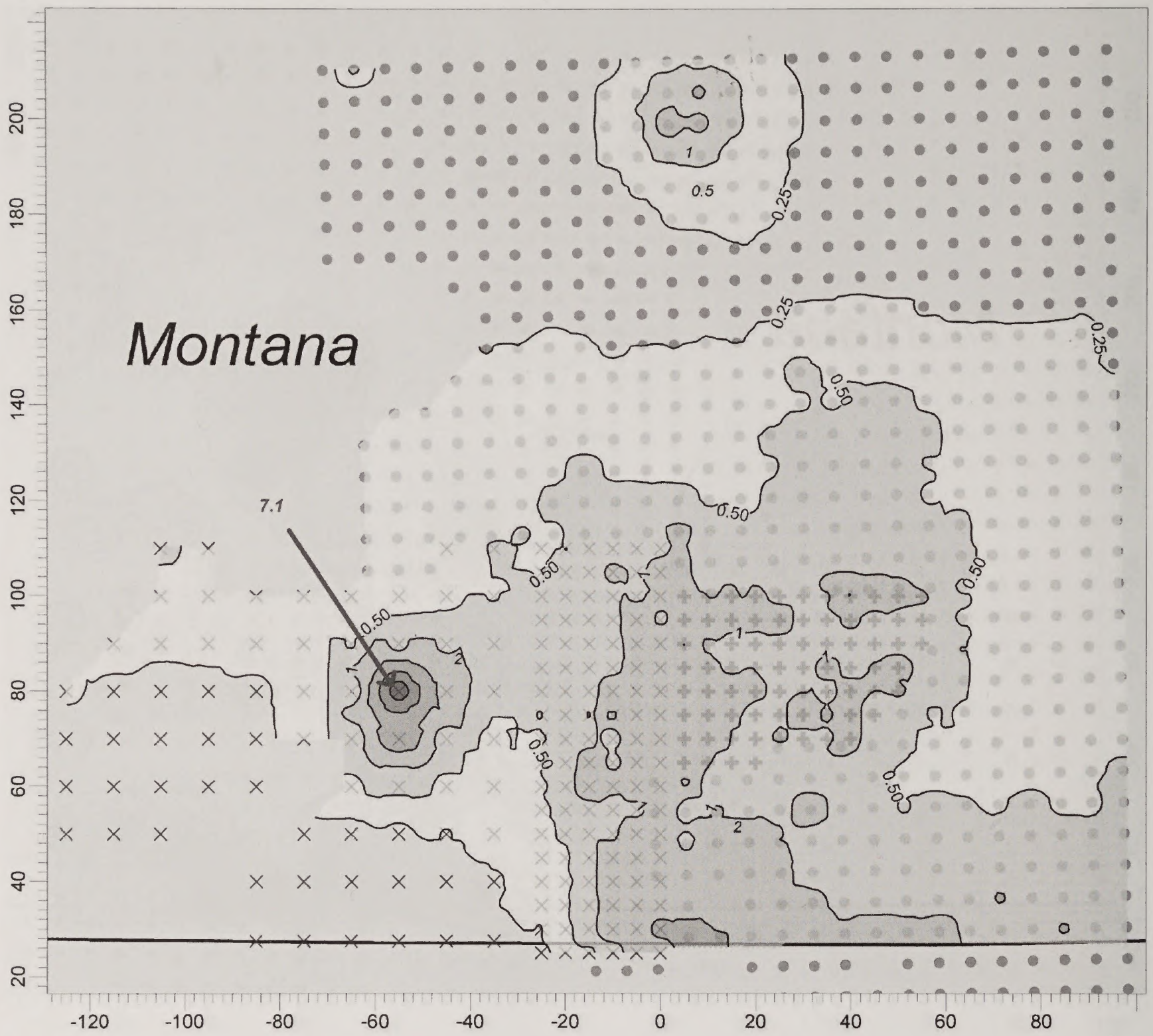
OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,452 / 40 km

MAX:	UNITS:	DATE:	PROJECT NO.:
0.02428	**ug/m^3**	**10/15/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

Annual NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
ALL Sources



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

0.25 | 0.50 | 1.00 | 2.00 | 4.00 | 6.00 | 8.00

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

Figure D-23

MODELER:

OUTPUT TYPE: **Concentration**

RECEPTORS: **785**

SCALE: 1:1,408

0 — 40 km

MAX: **7.12313**

UNITS: **ug/m^3**

DATE: **10/30/2007**

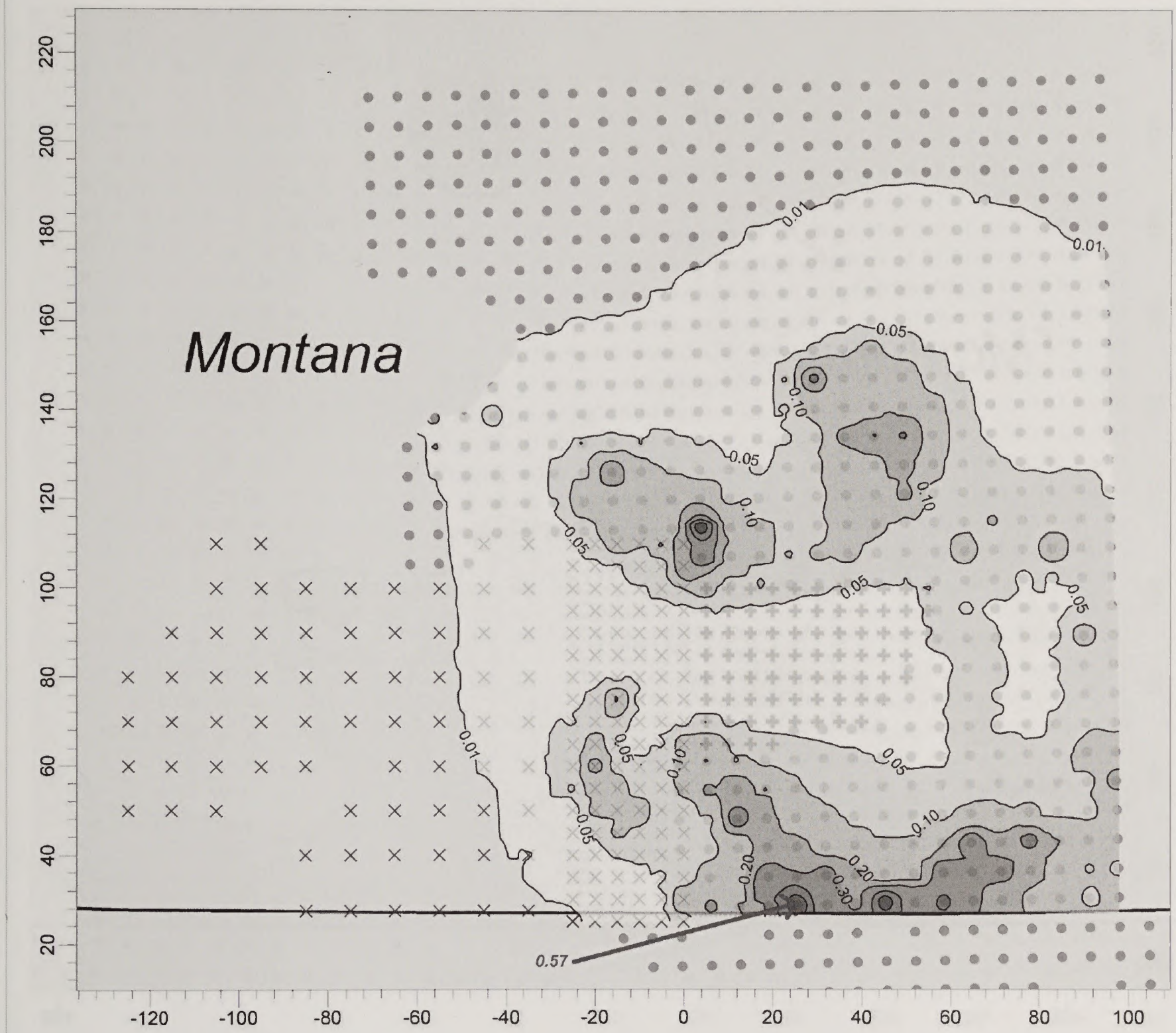
PROJECT NO.:

POST View - Lakes Environmental Software

Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\ALL 1.0g NOX 50% Red\Plots\NO2 Ann\NO2_ann.plt

PROJECT TITLE:

Annual NO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources - Scenario 2 (200:5:1 @ 1.0g/bhp-hr) 50% Reduction



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: MTCBM RFD OPER ug/m^3

0.01 0.05 0.10 0.20 0.30 0.40 0.50 0.60

COMMENTS:

* Assumes 75% NOx to NO2 conversion.

MODELING OPTIONS:

CONC

Figure D-24

MODELER:

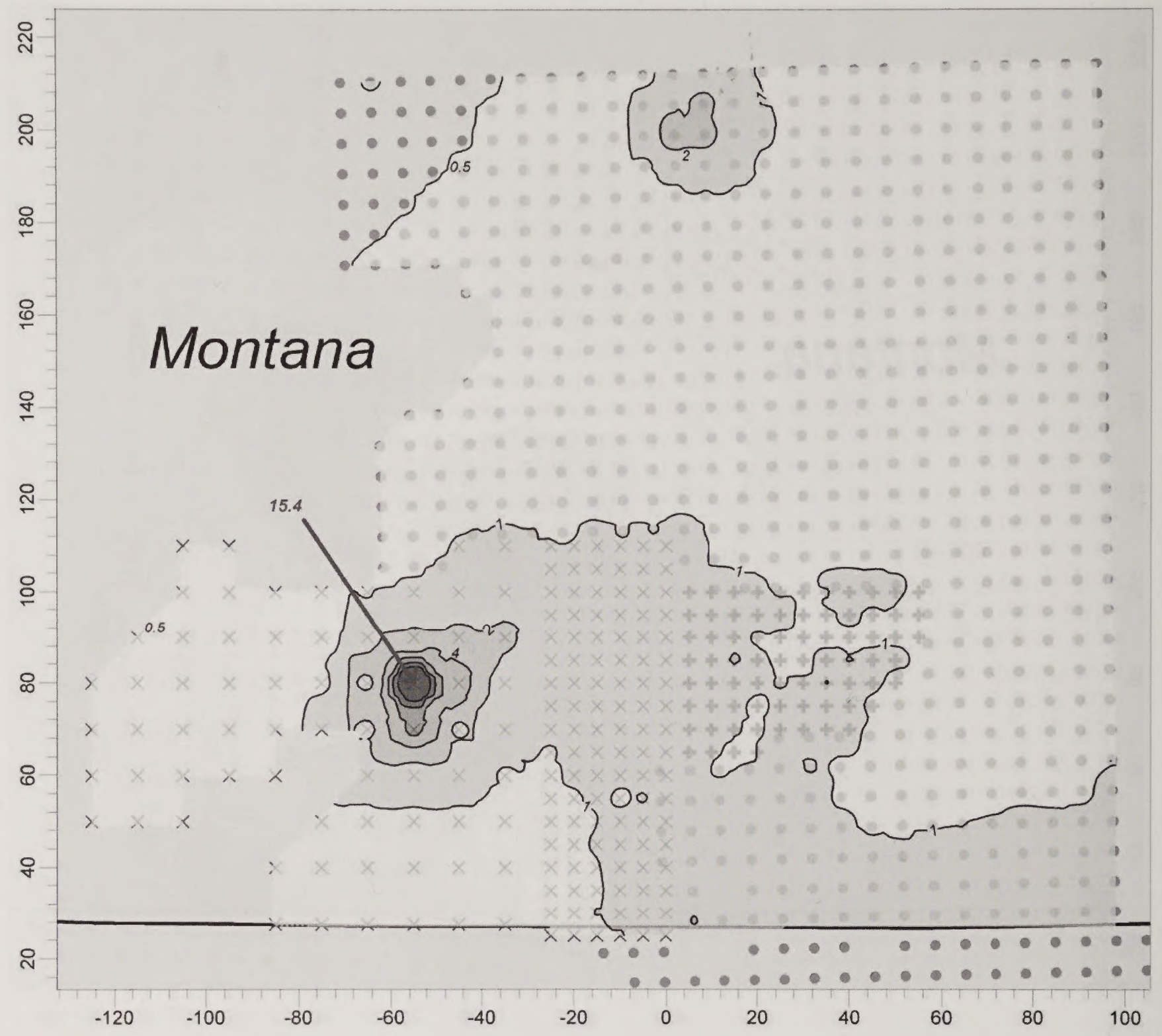
OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,500 / 40 km

MAX:	UNITS:	DATE:	PROJECT NO.:
0.5733	**ug/m^3**	**10/30/2007**	

POST View - Lakes Environmental Software Y:\BLM-MT\calpost recs within 1km excluded\Alt H revisions\MT CBNG RFD OPER 1.0g NOx 50% Red\Plots\Ann NO2\NO2_ann.plt

PROJECT TITLE:

Annual PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
ALL Sources - Alt H Revised



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

0.50 1.00 2.00 4.00 6.00 8.00 10.00

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

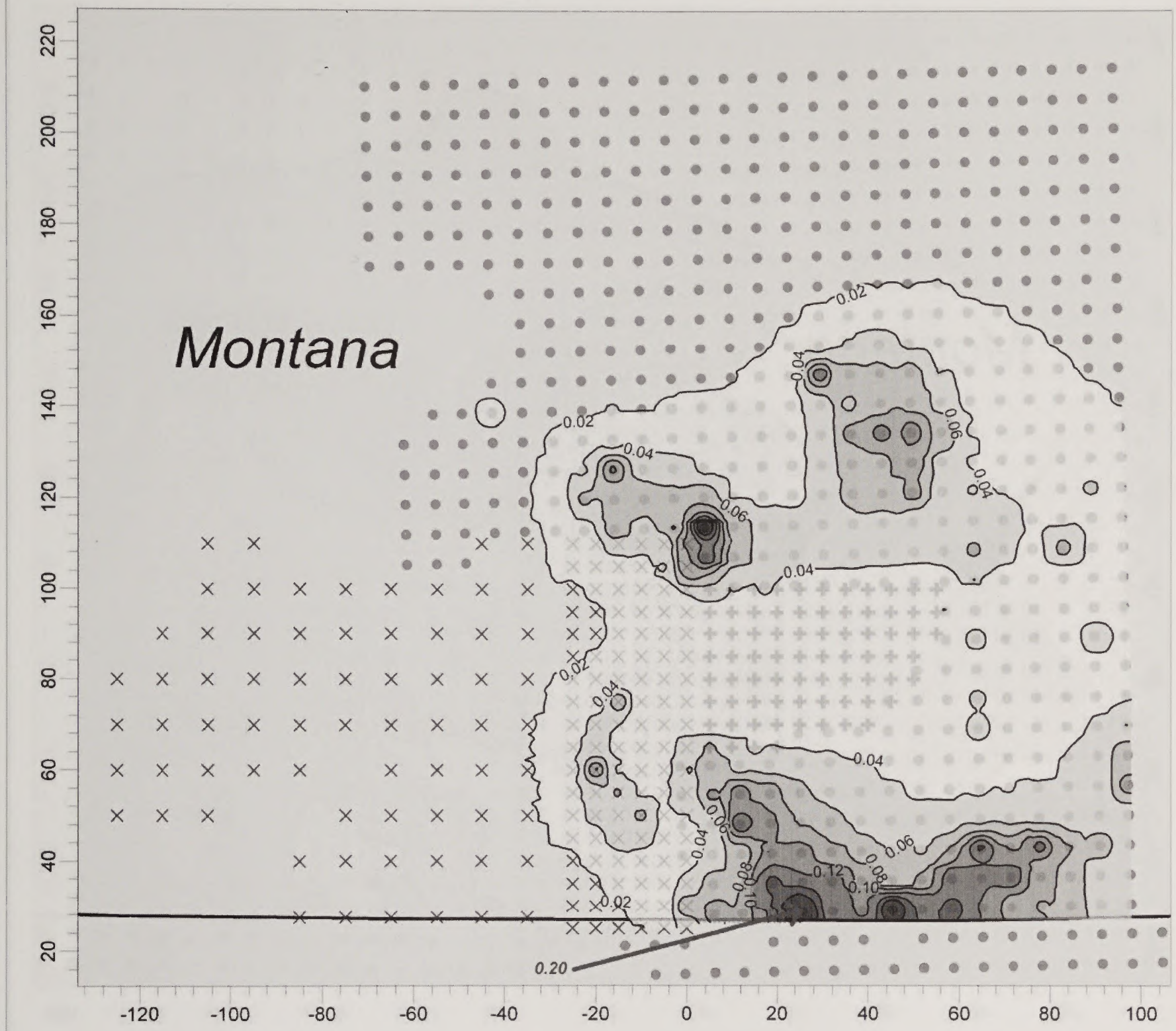
Figure D-25

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,452 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
15.431	**ug/m^3**	**10/12/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

Annual PM10 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources - Alt H Revised



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: MTCBM RFD OPER

ug/m^3

0.02 0.04 0.06 0.08 0.10 0.12 0.14 0.16

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

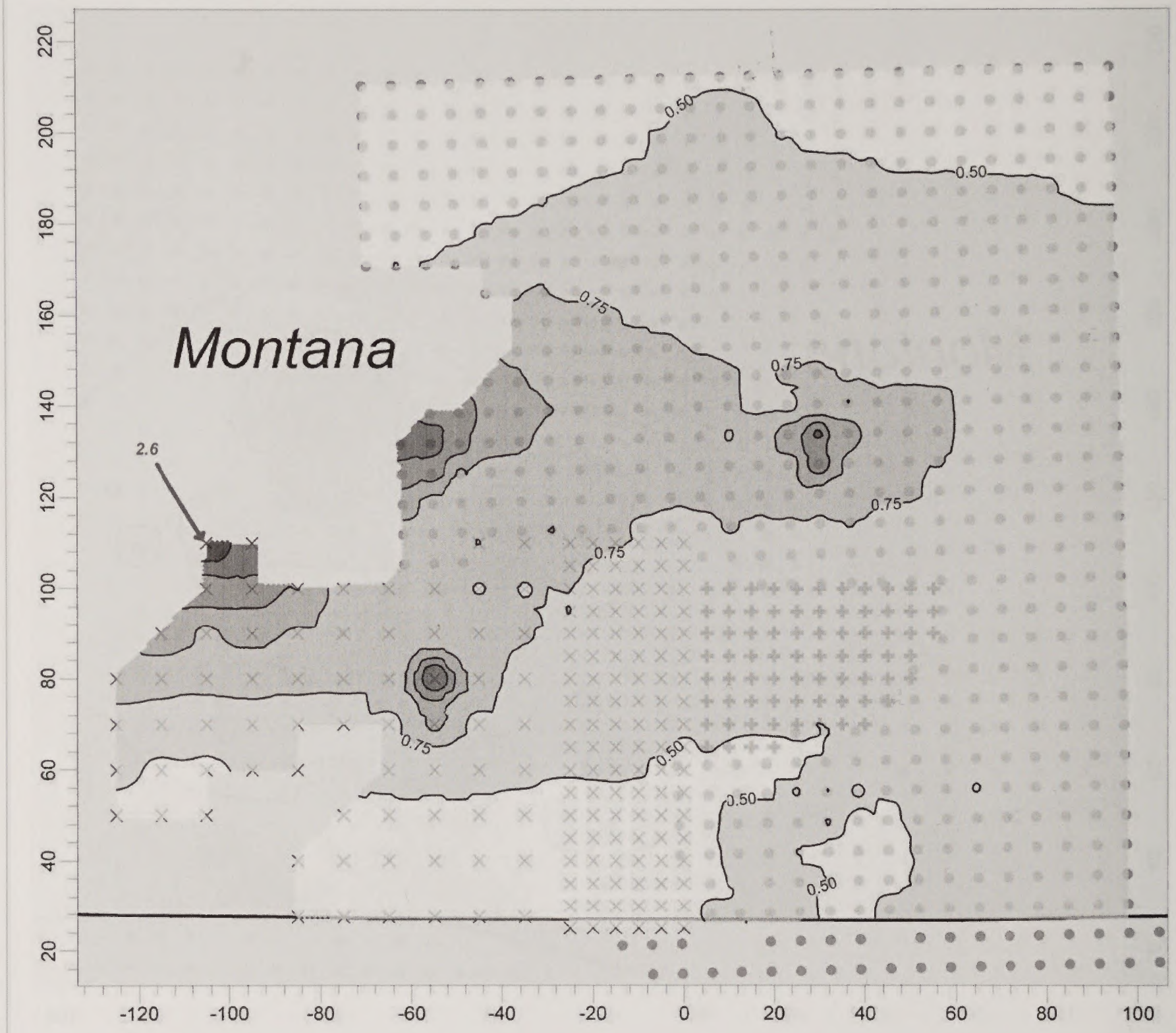
Figure D-26

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,465 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
0.20378	**ug/m^3**	**10/12/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

Annual SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
ALL Sources - Alt H Revised



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL ug/m^3

0.00 0.50 0.75 1.00 1.25 1.50 2.00

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

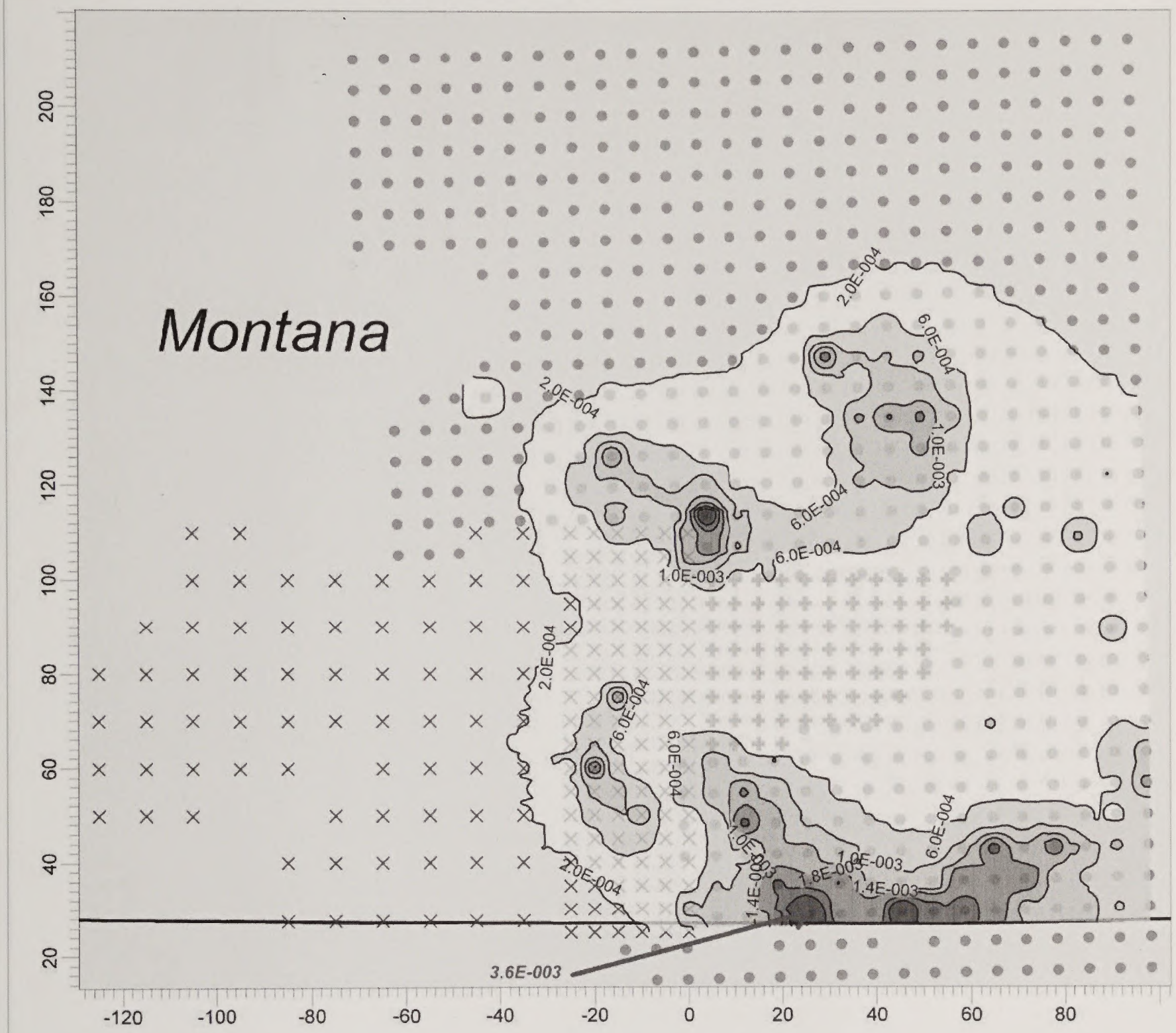
Figure D-27

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,465 / 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
2.6214	**ug/m^3**	**10/12/2007**	

POST View - Lakes Environmental Software

PROJECT TITLE:

Annual SO2 Concentrations for Montana Nearfield plus Crow IR & N. Cheyenne IR Receptors
MT CBNG RFD Operation Sources - Alt H Revised



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: MTCBM RFD OPER

ug/m^3

2.0E-004 6.0E-004 1.0E-003 1.4E-003 1.8E-003 2.2E-003 2.6E-003

COMMENTS:

* Assumes 50% of the 1 g NOx modeling case.

MODELING OPTIONS:

CONC

Figure D-28

OUTPUT TYPE:	RECEPTORS:	SCALE:	
Concentration	**785**	0	1:1,413 40 km
MAX:	UNITS:	DATE:	PROJECT NO.:
0.00358	**ug/m^3**	**10/12/2007**	

POST View - Lakes Environmental Software

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